

University of Alberta

**Examining the Lived Experience of Forwards From A National Hockey League
Team In Breakaway Situations: An Exploratory Study**

by

Crystal L. Grinevitch



**A thesis submitted to the Faculty of Graduate Studies and Research in partial
fulfillment of the requirements for the degree of Master of Arts**

Faculty of Physical Education and Recreation

Edmonton, Alberta

Fall 2002



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-81305-3

Canada

University of Alberta

Library Release Form

Name of Author: Crystal L. Grinevitch

Title of Thesis: Examining the Lived Experience of Forwards From A National
Hockey League Team In Breakaway Situations: An Exploratory Study

Degree: Master of Arts

Year this Degree Granted: 2002

Permission is hereby granted to the University of Alberta Library to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves all other publication and other rights in association with the copyright in the thesis, and except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatever without the author's prior written permission.



Crystal L. Grinevitch
Box 368,
Glendon, Alberta
T0A 1P0

August 26, 2002.

University of Alberta

Faculty of Graduate Studies and Research

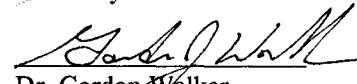
The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled Examining the Lived Experience of Forwards From A National Hockey League Team In Breakaway Situations: An Exploratory Study submitted by Crystal L. Grinevitch in partial fulfillment of the requirements for the degree of Masters of Arts.



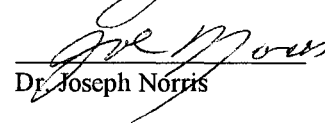
Dr. William Streat (Supervisor)



Dr. Garry Wheeler



Dr. Gordon Walker



Dr. Joseph Norris

August 26, 2002

Abstract

The present study used semi-structured interviews of 10 National Hockey League forwards with the goal to further the understanding of their experiences on breakaways. Research on anxiety and its effects on performance, flow and factors that influence its occurrence, and confidence and its antecedents, were used to guide this study. Major themes (and subcategories) were perceived physiological changes (physiological activation, muscular tension), affective changes (anxiety, excitement, relaxed intensity, mixed emotions), the feeling that time has/has not changed (perception that time slows down, speeds up, or stays at regular speed), cognition (tactical focus, temporal cognitive focus, distracting thoughts, positive thoughts), attention (crowd, comments from coaches/teammates, player positioning, sense of responsibility), the issue of feeling in control (perception of control, control in certain conditions, and not being in control), and factors that influence the experience (confidence, sense of security in their position on the team, game score/time, playoffs, location of the game, penalty shot). Results are discussed with respect to implications for sport psychology intervention.

Table of Contents

Delimitations Of This Study	5
Strengths/Rationale Of This Study	6
Literature Review	8
Past Research On Anxiety	8
Past Research On Flow And Enjoyment	19
Past Research On Confidence	24
Researcher's Background	26
Method	29
Participants	29
Procedure	30
Data Analysis	35
Results and Discussion	39
Perceived Physiological Changes	41
Physiological activation	41
Muscular tension	42
Affective Changes	43
Anxiety	43
Excitement	44
Relaxed Intensity	45
Mixed emotions	46
The Feeling That Time Has/Has Not Changed	47
Perception that time slows down	48
Perception that time speeds up	48
Perception that time stays at regular speed	48
Cognition	49
Tactical focus	49
Temporal cognitive focus	53
Distracting thoughts	54
Positive thoughts	56

Attention	56
Crowd	56
Comments from coaches and teammates	58
Player positioning on the ice	59
Sense of responsibility	60
Issue of Feeling In Control	62
Perception of control	62
Perception of control in certain conditions	63
Perception of not being in control	64
Factors That Influence The Experience	64
Confidence	64
Sense of security in their position on the team	67
Game score/time	70
Playoffs	73
Location of the game	74
Penalty shot	75
Main Findings	78
Limitations of This Study	78
Practical Implications For Sport Psychologists and Future Researchers	80
Implications For Interventions	85
Conclusion	89
References	90
Appendix A	98
Potential Interview Questions	98
Appendix B	100
Breakaway Experience Introductory Checklist	100

List of Tables

Table 1. Terms Often Associated With Anxiety	3
Table 2. Factors Found To Influence Anxiety Levels	10
Table 3. 9 Characteristics of Flow	20
Table 4. Factors Reported to Help and to Prevent Flow	21
Table 5. Factors Reported to Disrupt Flow	21
Table 6. Major Themes and Subcategories	36
Table 7. Relationship Of Sub-Themes To Existing Research	79
Table 8. Possible Interventions For Potential Challenges on Breakaways	86

Examining the Lived Experience of Forwards From A National Hockey League
Team In Breakaway Situations: An Exploratory Study

Hockey is one of the most popular sports in Canada, recognized around the world as our national sport. Many fans watch the game loyally and are very curious about what it is like to be an NHL hockey player. Specifically, the intrigue surrounding what an elite level hockey player experiences in game situations is one that may be shared by many Canadians, especially the many youngsters who play hockey and endeavor to play at an elite level. It is arguable that one of the most exciting plays in hockey is the breakaway - where a game of 12 players narrows down to two and the possibility of scoring an all-important goal is great.

The purpose of this study was to examine what elite (NHL) hockey players experience in breakaway situations (defined as situations in which they have the puck in a position that there is nobody other than the opposition's goalie between them and the boards behind the net, and they have the opportunity to score) and to create a rich description of this experience so that readers could learn about aspects of breakaway experiences for NHL forwards that may have previously gone unnoticed (Barone, 1990), and so that this understanding could be used to increase player success on breakaways. The question being investigated was, "What is the lived experience of National Hockey League forwards in breakaway situations?" Is it an experience of anxiety, enjoyment, or something completely different? It was the intent of this study to provide information that may act as a starting point from which to begin the quest of providing answers for these questions.

We have no information in the literature regarding how breakaways are experienced by hockey players, but we do have some studies that appear to address factors and situations that are relevant to the breakaway experience.

Since breakaways are clearly an evaluative situation, studies regarding what athletes tend to experience in evaluative situations appear to be particularly relevant. There have been conflicting results in past research around the question of whether athletes experience anxiety (Dunn, 1999; Dunn & Nielsen, 1993; Jones, Hanton & Swain, 1994; Jones & Swain, 1992; Jones & Swain, 1995; Lewthwaite, 1990) or enjoyment (Csikszentmihalyi, 1975, 1990; Gould, Elkund, & Jackson, 1992; Jackson, 1996; Jackson & Csikszentmihalyi, 1999; Jackson, Kimiecik, Ford, & Marsh, 1998; Jackson & Roberts, 1992; Russell, 2000; Scanlan, Stein & Ravizza, 1989) when placed in competitive/evaluative situations.

In order to facilitate an effective discussion of past research on anxiety, flow, and confidence, it is essential to discuss and define the terms relevant to the literature in each of these areas. Terms relevant to the literature on anxiety include: anxiety, threat, stress, and coping (See Table 1 for a more complete list of terms). These terms are all related, but distinct. A debate exists as to whether anxiety can be facilitative (Jones, Hanton, & Swain, 1994; Jones & Swain, 1995; Jones, Swain, & Hardy 1993) or whether it is purely debilitating (Dunn & Nielsen, 1996; Lewthwaite, 1990; Paterson & Neufeld, 1987). This debate will be examined later in this paper, however, for the purposes of the results and discussion sections of this study, the definition of anxiety will be, "a response to psychological or physical danger which causes the individual to experience unpleasant negative emotions or distress" (Dunn & Nielsen, 1996, p.112). This definition is based on the premise that anxiety has only negative affective effects, and thus leads logically to the assumption that anxiety is a phenomenon that has debilitating results.

The construct of anxiety can be further broken down into state and trait anxiety. State anxiety is the "emotional reaction of response that is evoked in an

Table 1
Terms Often Associated With Anxiety:

Threat	Worry
Coping	Emotionality
Stress	Tension
<u>Nervousness</u>	

Note. Terms are taken from various research studies discussed in this section.

individual who perceives a particular situation as personally dangerous or frightening to him" (Spielberger, 1971, p.267). Trait anxiety is defined as "a motive or acquired behavioural disposition that predisposes an individual to perceive a wide range of objectively nondangerous circumstances as threatening, and to respond to these with state anxiety responses disproportionate in intensity to the magnitude of the objective danger" (Spielberger, 1966, p.17).

This construct of state anxiety can be further divided into two parts: somatic anxiety and cognitive anxiety. Somatic anxiety refers to "physical symptoms such as nervousness and tension" (Jones, Swain, & Cale, 1990, p.107), while cognitive anxiety is "characterized by negative expectations, lack of concentration and disrupted attention" (Jones et al., 1990, p.107).

The term "stress" is used to describe the actual "amount of physical or psychological danger associated with the objective stimulus properties of a situation" (Spielberger, 1971, pp. 266-267). Thus, there can be individual differences in anxiety experienced in response to identical "stressful" situations. Spielberger (1971) also claimed that the appraisal of a situation as threatening is influenced by individual differences in aptitudes, skills, personality dispositions, and past experiences in similar situations. Based on the degree of threat that is perceived, the intensity and duration of the state anxiety experienced will be determined.

Terms that are relevant to the literature on flow include: flow, peak experience, and peak performance. Flow is defined as "a state of optimal experiencing involving total absorption in a task, and creating a state of consciousness where optimal levels of functioning often occur" (Jackson, 1995, p.138). Jackson went on to explain that if the perceived demands of the activity exceed the performer's perceived skills then anxiety is the result. If perceived skills are greater than the perceived challenges in the situation, then boredom is the result. Jackson (1995) posited that flow is the result when the balance between flow and challenges is optimal.

Closely related to the concept of flow are the concepts of peak experience and peak performance. Jackson and Roberts (1992) used the term peak experience to mean a time when an athlete experiences optimal joy and satisfaction while performing. They used the term peak performance to refer to a time when an athlete performs at a level that is higher than they have ever performed before. Peak performances are those moments when everything just seems to come together and the result is the athlete's ultimate performance. Research suggests that flow is a precursor to both peak performance and peak experience (Gould, Elkund, & Jackson, 1992; Jackson & Roberts, 1992). This link will be examined further in the literature review section.

Finally, terms that are related to the literature on confidence include: confidence, trait self-confidence, state self-confidence, and self-efficacy. It is necessary to note that there are many different definitions and operationalizations of the term "confidence". Vealey (1986) conceptualizes confidence as being separated into two constructs: trait self-confidence (SC-trait) and state self-confidence (SC-state). Vealey defined SC-trait as "the belief or degree of certainty individuals usually possess about their ability to be successful in sport" (p.223), while SC-state was defined as "the belief or degree of certainty

individuals possess at one particular moment about their ability to be successful in sport" (p.223). SC-state is less stable than SC- trait, varying from sport to sport and even from situation to situation. For instance, players may have high levels of SC-trait with regards to their overall ability to score on breakaways. However, they may have low levels of SC-state with regards to their ability to score on a particular goaltender.

Bandura (1977) introduced an even more specific construct related to confidence. His construct of self-efficacy refers to a situation-specific self-confidence. Self-efficacy theory (Bandura, 1977) represents an approach that investigates perceived ability to perform specific skills in a specific context.

For the purposes of this study, self-confidence will be defined as "the belief that [one] can successfully execute a specific activity rather than a global trait that accounts for overall performance optimism" (Feltz, as cited in Hardy, Jones, & Gould, 1997, p.45). This definition would fall between Bandura's (1977) concept of self-efficacy and Vealey's (1986) concept of state-confidence on a continuum of specificity of definitions.

Delimitations Of This Study

This study examined the experience of a very small, very specific group of athletes. Because only a very specific group of NHL forwards were being interviewed, the transferability of results may be very limited. The many uniquenesses that exist in the context of being an NHL forward on a specific team could make finding another comparable context difficult. Thus, it may be unwise to transfer findings outside of the sport of hockey. In fact, this group of participants is playing at such an elite level, that results may not even be transferable to other levels of hockey. As well, since players are all from a single team, the possibility exists that experiences may vary from team to team, and thus caution must be exercised when transferring results of this study to other teams in

the NHL. However, some experiences expressed in this study may be very useful for coaches and sport psychologists by assisting them to think about the many variables that are involved in shaping the experience. The ultimate decision as to whether the results are transferable to a specific situation is left to the reader (Lincoln & Guba, 1985). The intention of this study is to capture the essence of the experience of NHL forwards on breakaways in a detailed way so that readers can decide how closely the context in this study matches the context of other specific situations that are of interest to them. The experiences of other players in other contexts may be very similar to those described in this study, or they may be quite different.

Since only forwards were interviewed, results may not be transferable to other positions of play without further investigation. It is possible that these results will represent the experiences of all hockey players in breakaway situations, but the bottom line is that:

at best the investigator can supply only that information about the studied site that may make possible a judgment of transferability to some other site; the final judgment on that matter is, however, vested in the person seeking to make the transfer. (Lincoln & Guba, 1985, p.217)

Strengths/Rationale Of This Study

The NHL is arguably the most elite level of hockey in the world, and this type of access to the experiences of NHL players is rare and very valuable. By understanding what it is like for these NHL forwards on breakaways, perhaps we can begin to understand why these players have succeeded in making it to such an elite level in their sport. This study presents rare data on NHL players' experiences that could be used for future comparisons to experiences of players at other levels of hockey. Comparisons may provide new and useful information about how successful elite hockey players' experiences and perceptions on

breakaways differ from less successful, less elite players' experiences. As with any previously unstudied group of individuals, this group of athletes provided the field of sport psychology with what may be new and valuable information.

The openness of a semi-structured interview provided the flexibility with which to really tap into the experience of the participants. The participants were able to lead the interviewer in any direction that they felt was necessary in order to fully explain their experience in breakaway situations. At the same time, the interviewer had a set of pre-planned questions that helped to ensure that many aspects of the topic were covered (See Appendix A). As well, since the participants were very co-operative and willing to answer all questions, it was possible to explore and examine their experiences in great detail. Participants were encouraged at the end of the interview to add any parts of their experiences that was not discussed. They were also allowed to tell stories and recall experiences that were not related to the question being asked.

A final factor that strengthened this study was the fact that the interviewer had the opportunity to interact with and develop a rapport with the players prior to interviewing. Gaining trust and respect is an important part of the interviewing process (Rubin & Rubin, 1995), and this type of access to NHL players is quite rare and thus relatively unique to this study.

Literature Review

At this point, we have little information regarding what hockey players experience in breakaway situations. In order to achieve the goal of reaching an understanding of what NHL forwards experience on breakaways, it is essential that we look to previous research as a starting point from which to begin our search. As such, it is necessary to examine literature that may be related, given the contexts that are being examined and the factors that are being discussed. Knowing that a breakaway is an evaluative situation that involves personally relevant goals and requires control of physical movements and cognitive processes in order to execute the appropriate movements, it appears as though research on anxiety, flow, and confidence may provide useful information and insights into what the experience might be like.

Past Research On Anxiety

Closely related to the concept of anxiety is the construct of "threat". Threat is defined as an individual's "subjective (phenomenological) appraisal of the situation as physically or psychologically frightening or dangerous for him" (Spielberger, 1971, p.267). See Table 1 for a list of terms that are often associated with anxiety.

Lewthwaite (1990) found that "threat is appraised when demand/resource imbalances are perceived in situations where important or personally meaningful goals, values, opportunities, motives, or commitments are believed to be endangered" (p.282). This conceptualization suggests that there are two necessary conditions in order for an athlete to experience a threat in a given situation: personally important goals must be involved, and these goals must be believed to be endangered.

Research also suggests a cumulative effect such that the greater the number of personally important goals that are salient in the athletic situation, the

greater the perception of threat, and the greater the experience of anxiety when the chances of achieving these goals are believed to be threatened (Paterson & Neufeld, 1987). Threat is considered by Paterson and Neufeld (1987) to be the degree to which the athlete will receive blame for the consequences of not achieving his/her goals. Gould, Horn, and Spreeman (as cited in Hammermeister & Burton, 2001), identified fear of failure/feelings of inadequacy, social evaluation, and external control/guilt as sources of threat for elite junior wrestlers.

The term "coping" is also often used in a discussion of anxiety. Coping is defined as the "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing of exceeding the resources of the person" (Lazarus & Folkman, 1984, p.141).

Lazarus's (1991) model of stress proposes that experiencing stress is a function of three processes: primary appraisal, secondary appraisal, and perceived coping resources. (See Table 2 for a complete list of factors that have been found, in various different studies, to affect anxiety levels.) Primary appraisal is the assessment of the existence of challenge, threat, and harm/loss in the environment. Lazarus noted that appraisal of threat is the primary appraisal that is most closely related to the experience of anxiety. Secondary appraisal is the evaluation of what the individual can do to deal with the appraised threat. This perception of control (or lack thereof) is recognized as a major antecedent of anxiety. (Hammermeister & Burton, 1995, 2001; Lane, Rodger, & Karageorghis, 1997; Lane, Terry, & Karageorghis, 1995a; 1995b.) Finally, perceived coping skills are the skills/options that the individual possesses which will allow them to deal with the threat effectively.

Hammermeister and Burton (2001) tested Lazarus's (1991) stress model on triathletes, middle distance runners, and cyclists. Participants ranged in

Table 2
Factors Found To Influence Anxiety Levels

-
1. Personal importance of the goals involved
 2. Goals are endangered
 3. Degree to which athlete will be held accountable for the outcome
 4. Fear of failure/feelings of inadequacy
 5. Social evaluation
 6. Perception of control (or lack thereof)
 7. Perceived coping skills
 8. Perceived readiness
 9. Environmental conditions
 10. Coach's influence
 11. Negative certainty/uncertainty
 12. Game/Score/Time Criticality
 13. Individual successes/failures throughout the game and the year
 14. Perceived importance of the outcome
-

ability from professional/elite athletes to mid-pack, age-group competitors. Congruent with Lazarus's model, they found that high-anxious athletes [as determined by scores on CSAI-2 (Martens, Burton, Vealey, Bump, & Smith, 1990)] exhibited higher threat and lower control and coping scores (as determined by respective scores on perceived threat to competitive Endurance Goal Threats Inventory, and Coping with Endurance Sports Questionnaire) than did other athletes. MANOVA results revealed that more personally relevant threats seemed to impact anxiety more than environmental threats. Since a major role of an NHL forward is to score goals, and since breakaways are viewed as one of the best scoring opportunities in hockey, breakaways appear to contain many potentially personally relevant threats. Thus, Hammermeister and Burton's findings may be particularly relevant to the present study.

A great deal of research has been done around the sources of pre-event anxiety. Hammermeister and Burton (1995) found that for Ironman triathletes, ranging in ability from professional (top ten finishers) to age-group competitors, anxiety is the by-product of three factors: perceived control, perceived threat, and coping resources. They postulated that this is related to the fact that since

Ironman triathlons are long and complex events, the number of things in the direct control of the athlete are few, the potential number of goals to be threatened are great, and the number of situations during an event that will require coping is large (Hammermeister & Burton, 1995). In an event that is as long as an Ironman triathlon, many things can threaten a competitor, including environmental conditions in each segment, injuries occurring along the course of the race, or even equipment failures. There are many variables that influence performance in an Ironman triathlon, and as the race goes along, the number of things in the direct control of the athlete (i.e., equipment condition, physical condition of the athlete, and the ability to be prepared for environmental conditions such as weather) decrease due to changing conditions as a result of time lapsing. This results in the athlete needing to cope with many things that would not be relevant in shorter events in which these conditions remain stable throughout the event. For instance, there is not time for equipment conditions or weather to change over the course of a 6-second 100m sprint. Similarly, there is not enough time for the ice conditions or the player's physical condition to change over the course of a split-second breakaway.

In a study of university and club rugby players examining antecedents of anxiety conducted by Lane, Rodger, and Karageorghis (1997), the CSAI-2 (Martens, Burton, Vealey, Bump, & Smith, 1990) was administered one hour before the game to assess anxiety levels. A pre-match questionnaire, which was based on the Prerace Questionnaire (Jones, Swain, & Cale, 1990) and modified based on interviews with rugby players regarding situational variables that they perceived to influence anxiety levels prior to competition, was also administered one hour prior to competing. Pre-match questionnaires showed that for these university and club rugby players, perceived readiness, match conditions, and coach's influence were the most common and influential antecedents of pre-game

anxiety (Lane, Rodger, & Karageorghis, 1997). Similarly, Lane, Terry, and Karageorghis (1995a) reported that attitude toward previous performance, race goals, recent form, perceived readiness, environmental conditions, and coach's influence accounted for 70.7% of the variance in anxiety (as measured by the CSAI-2) experienced by triathletes before the race. These same factors accounted for 73.5% of the variance in anxiety experienced by duathletes prior to the race (Lane, Terry, & Karageorghis, 1995b). Based on these findings, the players in the present study may have been largely affected by their past breakaway chances, their goals regarding the number of goals they want to score in the given game/season, their perceived readiness for the game, the ice conditions, the crowd, and their interactions with their coach.

In spite of all of the research that has been done to examine the antecedents of anxiety prior to competition, relatively few studies have examined the sources or threat in specific within-game situations. Dunn and Nielsen (1993) are one of the only exceptions, as they researched threat perceptions of varsity hockey and soccer players in game situations. Athletes were asked to respond to an inventory which included fifteen specific anxiety-inducing game situations for each sport [based on a previously established taxonomy of athlete-generated anxiety-inducing game situations, as cited in Dunn & Nielsen, (1993)]. They found that situational perceptions of threat in hockey and soccer players are represented by three dimensions: negative certainty/uncertainty, personal threat, and controllability (Dunn & Nielsen). Dimensions were determined by transferring individual ratings to individual similarities matrices, which were then subjected to a multidimensional scaling analysis using an individual differences scaling model to determine the underlying psychological dimensions that the threat perceptions were based on.

The dimension of negative certainty/uncertainty included situations in which an athlete's actions had yet to take place, and where the potential for failure still existed, for example, when the player is about to take a crucial defensive face-off. The personal threat dimension indicated the degree to which the "negative spotlight" (Fisher & Zwart, 1982) shines on the player in each situation (i.e., the degree to which the athlete will receive blame for the consequences of his action in a given situation). The third dimension of controllability (Dunn & Nielsen, 1993) reflected the degree to which the athletes felt that they could control the outcome of a situation, for example, in a penalty shot. Findings of this study suggest that as uncertainty increases, and the degree to which the negative spotlight focuses on an athlete increases, and the controllability decreases, tendency to experience anxiety increases (Dunn & Nielsen, 1993). Based on these findings, Dunn and Nielsen suggested that situations in which the number of players involved decreases, the anxiety experienced by those players that are involved in the situation increases due to the fact that their performance is readily observable, and thus they are held accountable for the outcome of their performance. This research appears to be particularly relevant to the present study, given the fact that a breakaway involves only two of the 12 players on the ice, is very observable, and players are considered to be very accountable for whether or not they score.

Dunn and Nielsen (1996), in a study of nine university, college, and regional basketball, field hockey, ice hockey, and soccer teams, identified and classified situations in which the tendency to experience anxiety is high across the four sports which were considered to have certain parallel structural features associated with continuous flow invasion sports (Thorpe, Bunker, & Almond, 1986). The four superordinate categories of anxiety-inducing situations that Dunn and Nielsen (1996) found were (a) Ongoing Game Situations, (b)

Game/Score/Time Criticality Situations, (c) Coach Related Situations, and (d) Miscellaneous Situations. These categories were derived using clustering.

The Ongoing Game Situations (OGS) category included those situations that occurred while the puck/ball was still in play, for example a free throw or a penalty kick. This category consisted of 41% of all anxiety-inducing situations that were listed. The Game/Score/Time Criticality (GSTC) included situations in which the focus was on conditions of score, time, or game importance, for example a free throw in a close game. The GSTC category accounted for 25% of the anxiety-inducing situations that were listed by participants. The third major category, Coach Related Situations (CRS), encompassed all situations that were thought to be under the direct or indirect influence of the coach, and accounted for 18% of all anxiety-inducing situations listed. The remaining 16% of situations listed consisted of responses that were distinguishable in content, but did not fit into one of the other three categories, were classified into the Miscellaneous Situations category.

This research by Dunn and Nielsen (1996) suggests that situations that regularly occur during a game account for much of the anxiety experienced, but that additional anxiety is experienced in situations where the game score, time, and/or importance become relevant. It also suggests that the potential for increased anxiety exists in situations in which coaches' influences become key to the situation. Breakaways would fall under the OGS category, and, depending on the score in the game and the time of the game, they could also fall under the GSTC category. Thus, it appeared that the potential existed to experience anxiety on breakaways.

In line with these Dunn and Nielsen (1996) findings that game score and time influence anxiety levels, Martens and Gill (1977), in a study of elementary students, found that success failure at a motor task predicted state anxiety levels.

They found that subjects who were in the group that won 80% of their games maintained low levels of state anxiety [as assessed by the Sport Competition Anxiety Test (Martens, 1977, 1982)] throughout the competition, while the group that won only 20% of their games had a high level of state anxiety both at the midpoint of the competition and at the end. Martens and Gill found in fact, that state anxiety levels for all participants increased when they failed and were lowered when they succeeded. This finding would support the contention that state anxiety levels would fluctuate during a game depending upon individual successes and failure throughout the game.

Other factors that have been found to affect levels of state anxiety are the perceived importance of the outcome of the activity (PI) the perceived uncertainty of the outcome (PU), and competitive trait anxiety, (Martens, Vealey, & Burton, 1990). Martens et al. hypothesized that both PI and PU must be present in order for threat to be perceived. They further postulated that these two variables have a multiplicative effect on levels of state anxiety.

Lox (1992), in a study of female intercollegiate volleyball players found that uncertainty of outcome was positively correlated to levels of cognitive anxiety, while importance of outcome was positively correlated to levels of somatic anxiety. A study of golfers (Marchant, Morris, & Andersen, 1997) revealed, however, that perceived importance was strongly associated with both somatic and cognitive state anxiety. Marchant et al. found that perceived importance was a significant predictor of cognitive state anxiety (as measured by CSAI - 2) at all four stages of the competition, while perceived importance only became a significant predictor of somatic state anxiety after the third round of competition. A final finding of this study was that as the golf competition progressed, differences in overall state anxiety levels (calculated by combining somatic and cognitive anxiety scores on the CSAI - 2) of the high perceived

importance and low perceived important groups increased. This could indicate that the end of a competition is only a source of greater anxiety for persons who perceive the outcome of the competition to be important.

Research in test anxiety provides some insight into the experience of persons when they are in situations that provoke the experience of symptoms of anxiety. Salame (1984) suggested two major components in the experience of test anxiety: the worry component and the emotionality component. The worry component of the experience of test anxiety is said to include self-focused attention, a lack of confidence in ability or about performance, feelings of inadequacy and insecurity, poor self-evaluation comparatively to others, self-concept of vulnerability to failure, and thinking about the consequences of failure (Salame, 1984). This parallels the concept of cognitive anxiety (Jones et al., 1990). The emotionality component of the experience of test anxiety is said to include feelings of tension, apprehension, nervousness and uneasiness, along with a rapid heartbeat, sweating, upset stomach, and sometimes dryness of mouth and a headache (Salame, 1984). This component parallels the concept of somatic anxiety (Jones et al., 1990). This experience is shown by Salame (1984) to be an unpleasant, performance-debilitating reaction.

In contrast to our definition of anxiety as having negative affective effects (p.5), recent studies have shown that symptoms associated with anxiety have also resulted in facilitation of performance in many instances. Jones, Swain, and Hardy (1993) examined intensity and direction of competitive state anxiety symptoms in a sample of competitive female gymnasts. Their results showed no difference in intensity of anxiety symptoms between those gymnasts who performed poorly and those who performed well, however, there was a difference noted in direction of anxiety symptoms experienced by each group of gymnasts (Jones et al., 1993). Gymnasts who performed well reported their anxiety

symptoms as being more facilitative and less debilitating to performance than gymnasts who performed poorly. Jones, Hanton, and Swain (1994) reported similar findings from their research on elite and non-elite swimmers. Elite swimmers were found to interpret anxiety symptoms as being more facilitative to performance than their non-elite counterparts (Jones et al., 1994). In another study of elite and non-elite cricketers, Jones and Swain (1995) replicated these findings on directional differences in anxiety symptoms between the elite and non-elite groups. Their data revealed that only a very small number of elite cricketers reported their anxiety symptoms as being debilitating, while most elite cricketers reported their anxiety symptoms as being facilitative (Jones & Swain, 1995).

With the amount of research that has been done on anxiety in sport, it is surprising that so little has been done to interview athletes and tap into their lived experience in situations that have typically been thought to provoke an anxiety response in athletes. With the exception of research into the directional perceptions of cognitive anxiety (Jones, Hanton, & Swain, 1994; Jones & Swain, 1992; Jones & Swain, 1995), very little has been done to ask the athletes what exactly they experience in specific high-anxiety situations that occur within their performance. Hanton and Jones (1999), in an effort to track perceptions of anxiety symptoms across the careers of competitive swimmers, uncovered some insights into the lived experiences of swimmers prior to racing. Their results indicated that anxiety was interpreted as a negative, unwanted experience in the early years of racing, but was viewed as having potentially positive effects in the later years of racing (Hanton & Jones, 1999). Experiences of these swimmers in high anxiety states prior to racing were categorized by Hanton and Jones into Experiences of Competition Worries (ECW), Experiences of Preparation Worries (EPW), and Negative Somatic Feeling States (NSFS). The category ECW

included fears of coming last, worries about making mistakes, worries about swimming the correct number of lengths, worries about performing poorly, worries about "bottling under pressure" (Hanton & Jones, 1999, p.8), worries about letting the team down, and feeling scared of racing. The category of EPW included doubts as to whether or not the athlete perceived that they had trained enough. NSFS included feeling sick at the pool, feeling tired before the race, having a "funny feeling in my head" (p.8), having pins and needles in their hands, and constantly fidgeting. What has not been examined by research in the past is what an athlete experiences in high anxiety situations that occur during the game/performance. As well, it is unclear in this Hanton and Jones (1999) study as to whether the athletes perceived their anxiety as being facilitative because they won, or whether they won because they perceived their anxiety to be facilitative.

In light of these compelling findings on the existence of a directional element in the construct of anxiety (Jones et al., 1994; Jones & Swain, 1995; Jones et al., 1993), perhaps the possibility exists that we are mislabeling experiences with some symptoms that have typically been associated with anxiety. Perhaps we are quick to label any physiological arousal as anxiety when in fact it may not be anxiety at all. If anxiety causes the individual to experience unpleasant negative emotions or distress (Dunn & Nielsen, 1996), then how could it possibly be facilitative?

It appears as though there are many factors that can influence anxiety levels (See Table 2). Knowing this, it is very possible that players in the present study may experience anxiety on breakaways. It also appears that people interpret the symptoms associated with anxiety differently. The players' interpretations of anxiety symptoms that they may experience (i.e., whether they are facilitative or debilitative) may influence how they experience breakaways.

Past Research On Flow and Enjoyment

Since not all athletes experience anxiety in evaluative situations, the question remains: What do they experience? Another possible experience on a breakaway is that of flow. Are rapid heartrate, sweating, and upset stomach, the same symptoms that are experienced by these athletes when they are placed in game situations that involve an evaluative component? Or do athletes actually thrive in evaluative situations? Scanlan, Stein, and Ravizza (1989) found that elite figure skaters cited evaluative situations as a source of enjoyment. This research is in line with Csikszentmihalyi's (1975, 1990) and Jackson's (1996) research on flow.

Csikszentmihalyi's (1990) study of flow resulted in an assembly of nine defined characteristics of flow (See Table 3). The first dimension of flow is a match between perceived skills and challenges in a particular situation. The second dimension is a merging of action and awareness, where complete absorption in the task leads to automaticity and spontaneity and there is no separation between the performer and the actions being performed. The third dimension states that the performer has clear goals with regards to the task being performed. The availability of clear and immediate feedback that one is succeeding in one's goal is the fourth dimension. The fifth dimension is a total concentration on the task being performed, the sixth dimension is a sense of being in control without actively trying to be in control, and the seventh dimension is a loss of self-consciousness. Finally the eighth and ninth dimensions respectively include a sense of a loss or disorientation of time and an intrinsically rewarding experience. Given that the players in the present study are playing at the most elite level of hockey, the potential for them to perceive that they have high skill levels that match the challenges inherent in a breakaway appears to be logical. As well, feedback (whether or not they score) is immediate on breakaways. Based

Table 3
Nine Characteristics of Flow

-
1. Match between perceived skills and challenges.
 2. Merging of action and awareness.
 3. Clear goals.
 4. Availability of clear and immediate feedback.
 5. Total concentration on the task.
 6. Sense of being in control without actively trying to be in control.
 7. Loss of self-consciousness.
 8. Loss/Disorientation of time.
 9. Intrinsically rewarding.
-

Note. From Csikszentmihalyi (1990).

on the presence of these dimensions, it appears possible that some players in the present study will experience flow on some breakaways.

Jackson's (1996) research with elite (top ten in the world) cyclists, swimmers, triathletes, rugby players, field hockey players, and track and field competitors supported Csikszentmihalyi's (1990) nine dimensions of flow. Dimensions nine, six, five, and two were cited by most (greater and equal to 82%) athletes with 97% of the raw data themes falling into one of the nine dimensions (Csikszentmihalyi, 1990). Jackson (1996) concluded with the contention that "the richness of the athletes descriptions about flow state clearly show that it is an experience elite athletes are familiar with" (p.85). She went on to note, however, that terms such "being in the groove", "tuned in", "on auto" or "switched on" may make more sense to athletes. This insight may be important for interpreting responses in qualitative studies on athletes' experiences.

Jackson (1995) investigated factors that influenced the occurrence of flow in athletes from track and field, rowing, swimming, cycling, triathlon, rugby and field hockey who had at least a top ten placement in international competition. Using an inductive content analysis to analyze interview results, Jackson found several factors that were reported to help athletes get into a flow state, several factors that were reported to prevent athletes from getting into a flow state (See

Table 4
Factors Reported To Help and To Prevent Flow

<u>Factors that Help Flow</u>	<u>Factors that Prevent Flow</u>
Motivation to perform	Lack of motivation to perform
Achieving optimal arousal prior to competition	Non-optimal arousal levels
Using pre-competitive & competitive plans & prep	Problems with pre-competitive prep
Optimal physical prep and readiness	Non-optimal physical prep and readiness
Optimal enviro/situational conditions	Non-optimal enviro/situational conditions
Performance feeling good	Performance going poorly
Being focused	Having inappropriate focus
Having confidence & positive attitude	Lack confidence & having negative attitude
Positive team play/interaction	Negative team play/interaction

Note. From Jackson (1995). Prep=preparation, enviro=environmental.

Table 5
Factors That Disrupt Flow

Problems with physical readiness or physical state
Non-optimal environmental and situational influences
Performance errors/problems
Inappropriate focus
Doubting oneself or putting pressure on oneself
Problems with team performance or interactions

Note. From Jackson (1995).

Table 4), and several factors that were reported to disrupt them once they were in a flow state (See Table 5).

Factors reported to help flow included: motivation to perform, achieving optimal arousal before they compete, using pre-competitive and competitive plans and preparation, optimal physical preparation and readiness, optimal environmental and situational conditions, having the performance feel good, being focused, having confidence and a positive attitude, having positive team play and interaction, and having previous experience with flow in sport (Jackson, 1995). Jackson found that 64% of the athletes brought up a theme related to having confidence or positive mental attitude. This dimension, along with the dimension involving pre-competitive and competitive plans and preparation, which was also reported by 64% of the athletes, was the most commonly cited

dimension. This is a good indication, from an athlete's perspective, that maintaining a high level of confidence is key to experiencing flow. The finding that pre-competitive and competitive plans and preparations also play a key role may suggest a relationship between existence of pre-competitive and competitive plans and confidence levels. These factors may help to explain possible differences in what players in the present study may experience while on breakaways.

Nine factors were inductively formed to represent the factors that the athletes cited as preventing flow (Jackson, 1995). These factors included: lacking motivation to perform, non-optimal arousal levels, problems with pre-competitive preparation, non optimal physical preparation and readiness, non-optimal environmental and situational conditions, having the performance go poorly, having an inappropriate focus, lacking confidence and having a negative attitude, and negative team play and interaction. Jackson found that 75% of athletes cited non-optimal physical preparation as a factor that prevented flow for them, making this the most commonly cited factor. It appears that conditions that prevent flow are similar to conditions that are found to influence anxiety levels (See Table 2), suggesting an inverse relationship between anxiety levels and being in flow. It appears as though anxiety and flow exist on opposite ends of a continuum, with factors such as physical preparation and readiness, confidence levels, environmental conditions, and present/past performance acting as moderators.

Factors reported by Jackson (1995) which disrupted flow included: problems with physical readiness or physical state, non-optimal environmental and situational influences, performance errors/problems, inappropriate focus, doubting oneself or putting pressure on oneself, and problems with team

performance or interactions. The most commonly listed dimension, involving 71% of the athletes, was non-optimal environmental and situational influences.

In this category, rugby and hockey players reported that long stoppages in play, such as for an injury, were very disruptive to their flow state (Jackson, 1995). These players also reported that intermissions tended to disrupt flow, indicative perhaps that a situation right after intermission would be experienced differently than that same situation later in the period. This may come into play as a factor that would alter how the players in the present study experience breakaways.

A study by Jackson, Kimiecik, Ford and Marsh (1998) examining psychological correlates of flow in swimmers, triathletes, cyclists and track and field athletes participating in the World Masters Games created some interesting results. Perceived ability was the variable that had the most substantial correlations with flow. This finding lends support to the notion that both challenges and skills must be relatively high before flow can be experienced (Csikszentmihalyi & Nakamura, 1989). This study (Jackson et al., 1998) also found a strong negative correlation between anxiety and the dimensions of flow. Due to the link between flow and peak performance found in elite figure skaters (Jackson, 1992) and Division I college gymnasts, swimmers, golfers, cross-country and distance runners, track and field athletes, tennis players and divers (Jackson & Roberts, 1992), and Jackson et al.'s (1998) finding that anxiety is negatively correlated with flow, preliminary support is established for the contention that experiencing anxiety leads to performance decrements (Dunn & Nielsen, 1996; Lewthwaite, 1990; Paterson & Neufeld, 1987). Perhaps, since athletes in the present study are among the most elite in the world, they will report an absence of anxiety and a presence of flow. Perhaps this will be a common link connecting the most successful athletes.

Jackson and Roberts (1992) have found evidence to support the notion that flow is a precursor to peak performance and peak experience. Gould, Elkund, and Jackson (1992) found similar support of flow being a precursor to peak performance in Olympic Wrestlers.

Perhaps the same situation of uncertainty, evaluation, and lack of controllability that Dunn and Nielsen (1993) found to be a source of anxiety for some athletes, is just the challenge needed by other athletes to experience an optimal skills/challenge balance and to facilitate the occurrence of flow and peak performance. Since athletes in each study have not been asked to describe their experiences in specific situations that have been identified as inducing a high level of anxiety, how can we know for sure that what they experience in these situations is anxiety? Furthermore, how can we, as coaches and sport psychologists, expect to create programs for athletes that are effective in maximizing performance in specific situations if we are unsure of what the athlete experiences in these situations? Perhaps we are making dangerous assumptions about what experiences athletes have in specific game situations.

Past Research On Confidence

The concept of confidence was mentioned as a factor influencing both flow and anxiety. As such, an examination of some research surrounding this construct is warranted.

Mahoney and Avenier (1977) conducted one of the earliest studies which demonstrated the importance of confidence as a distinguishing factor between successful and less successful athletes. In this study, Mahoney and Avenier administered a questionnaire to 13 gymnasts 48 hours before the final trial for the U.S. Olympic team. They also interviewed participants at various stages during the competition. A comparison of data from those gymnasts who qualified and those who did not revealed that qualifiers reported higher levels of confidence

both 48 hours prior to the competition and at the various stages throughout the competition.

In another study, Mahoney, Gabriel and Perkins (1987) administered the Psychological Skills Inventory for Sports (PSIS) to 713 athletes from 20 sports. Athletes were either classified as elite (placed fourth or higher in National, Olympics, or World Championships), pre-elite (athletes competing in junior national events), or non-elite (members of major university athletic teams). Item analysis of the PSIS showed that elite performers had higher and more stable levels of self-confidence than the non-elite athletes, though no differences emerged between elite and pre-elite athletes. Subsequent regression analysis, factor analysis, and cluster analysis found that confidence was a major differentiating factor between elite and non-elite performers.

These findings by Mahoney and Avenier (1977) and Mahoney et al. (1987) provide support for Bandura's (1986) proposition that when in stressful situations, individuals with low self-efficacy will tend to give up, attribute failure internally, and experience greater anxiety. Since anxiety is associated with performance decrements (Dunn & Nielsen, 1996; Lewthwaite, 1990; Paterson & Neufeld, 1987), it appears logical that higher anxiety resulting from low self-efficacy would inhibit performers from reaching the elite level.

The next logical question would be, "So, where does this all-important confidence come from?" In a study of male field hockey and rugby players and female field hockey and netball players from quarter-final university athletics teams, Jones, Swain, and Cale (1991) found that antecedents of self-confidence are different for males and females. They found that while perceived importance of a good personal performance and perceived mental and physical readiness were the major predictors of self-confidence in females, extent to which they were likely to win and perception of opponents ability in relation to their own

were the major predictors of self-confidence (as measured by CSAI - 2) in males. Predictors were determined using a stepwise multiple regression analysis. These findings provide general support for Gill's (1998) proposal that females tend to focus more on personal goals and standards while males focus more upon personal comparison and winning. This focus on personal comparison and winning may greatly influence the experiences of male athletes, specifically the NHL forwards in the present study. Based on Jones et al.'s (1991) and Gill's (1998) findings, experiences of players in the present study may be largely influenced by whether they have been on a winning or losing streak, whether they are winning or losing the game at the time of the breakaway, and whether other people have scored on breakaways during that game or in previous games against the present goalie.

Academics have advised that "in the future, researchers must endeavor...to conduct individual difference analyses" (Dunn & Nielsen, 1993, p.462). Recommendations such as this one are based on the finding that different individuals can perceive and react differently to the same situation (Mischel, 1979). Researchers in the sport psychology domain have been encouraged to view the subjective experience of the athlete as an important source of information (Dewar & Horn, 1992; Fahlberg, Fahlberg, & Gates, 1992). It is imperative that we, as researchers, consult the athletes, and give them the opportunity to tell us what their lived experience is in specific game situations in order for us to draw conclusions about similarities in experiences that may prove to be useful in creating anxiety-control programs for athletes.

Researcher's Background

I am a twenty-three year old female. I spent the last five years working as a sport psychology consultant, counseling individual hockey players regarding different mental challenges that they have faced, giving seminars on mental skills

to hockey teams, and advising coaching staffs on how to handle different situations that have occurred with their teams. The most common problems presented by my hockey clients were high levels of anxiety during games, low levels of confidence in general, inconsistent performances, slumps, and mental blocks due to injuries. My past experiences working with hockey players have led me to believe that a breakaway would be a highly anxious situation for the player. Players that I have worked with have often presented the problem of panicking and tensing up when they get an opportunity to score. This led me to believe that players would likely feel anxious on breakaways.

I also have a brother who was a centre for an NCAA hockey team at the time of this study. His role on teams had always been to score goals. With skating speed as one of his assets, he experienced breakaways relatively frequently. As such, breakaways were a topic that we had discussed at length on many occasions. My experience working with my brother on mental skills to help him perform optimally on breakaways was one of the major factors influencing my interest in understanding how NHL forwards experience breakaways. I was interested to know whether their experiences were different or similar to my brother's.

This study was conducted with the team of players that I had worked with previously and worked with at the time of the study. I was available at the practice facility to talk to players during and after practice on a regular (every second day) basis. The players had both scheduled meetings and last-minute, unscheduled meetings with me. Some of the issues that we addressed in these meetings were players' experiences of high anxiety, difficulty clearing their minds and falling asleep after games, low confidence, and hesitation and fear resulting from injury. I taught the players mental skills including progressive relaxation, visualization, positive self-talk, and thought-stopping. My role had

also involved working individually with the players to get feedback for the coaching and scouting staff and developing mental programs for players who have been interested in enhancing the mental aspects of their game.

The work that I did to develop mental programs with the players may have created a comfortable environment for the players to talk to me. It also may have reduced much of the need to develop trust and rapport with the players, as much of that may have already existed. However, this prior relationship and the ongoing role that I had with the team may have inhibited players from telling me some aspects of their experiences that might have been viewed negatively for fear that the coaching staff would somehow find out. I believe that the trust was already built when they realized that our work on mental skills development remained confidential and was not discussed with any members of the coaching staff. I was sure to outline for the players that the information provided in interviews for this study would never be given to the coaching staff, much like the contents of our sessions designed to develop mental programs were never shared with the coaching staff.

Players (both those included in this sample and others who I have worked with in the past who are not included in this sample) have indicated to me in the past that they feel that they can relate to me because of my age and that they feel comfortable discussing their emotions with me because I am a female. However, it has also been brought to my attention that perhaps the fact that I am a young female prevents some players from providing me with information that they may perceive as being non-masculine. The possibility exists that some players provided only information that coincided with a stereotypically masculine role. Thus, my age and gender may have influenced the information that I was provided with by the participants.

Method

Participants

Participants were 10 male National Hockey League players who had between one year and five years of experience playing at the National Hockey League (NHL) level. This level of experience was a deliberate choice, as it was my belief that rookies would have a unique experience with breakaways, since these situations would be a new experience for them at the NHL level. Also, since breakaways are quite rare, and since rookies tend to get less ice-time than other players, it was likely that rookies would not have experienced a breakaway in the NHL yet. For these reasons, rookies were not included in the present sample. As well, it was my perception that a 10-year veteran would have a unique experience on breakaways, given their years of experience. Finally, it is likely that the group of players in the present study (those with one to five years experience) would be the most probable candidates to see a sport psychologist for help with breakaways, given that they would be dealing with new experiences and wanting to work on skills to maximize their performance in various situations. Veterans are likely to have already developed a plan for how to handle breakaways, and would be less likely to seek additional help. As such, this group of players with one to five years of experience appeared to be the most suited for the purposes of the study.

All players belonged to the same NHL team and played either left wing, right wing, or centre positions, and will herein be referred to as "forwards." Forwards were chosen as the focus of this study because they are the players who routinely experience breakaway situations. As a result, their reactions in these situations are key to their role on the team. Players in other positions do not experience breakaway situations as frequently, and thus their reactions in these

situations are not as key to their role on the team. For this reason, these players were not included in the present study.

In order to protect the identities of the participants, while still allowing each personality and attached experience to take life for the reader, each participant was randomly assigned a pseudonym, and will be identified throughout this study by his assigned pseudonym. Raw data will be presented in the results and discussion section of this paper according to major themes.

Procedure

As this was a study focusing on the experiences of forwards in breakaway situations, one could argue that we can come to understand the thoughts, feelings and perspectives of a person in a given situation with the benefits of a face-to-face interaction (Marshall & Rossman, 1999). An ideal format for gathering data in a face-to-face interaction is via interviews. They afford the researcher the opportunity to hear the tone and speed of speech and to see the gestures, physical reactions to questions, and facial expressions. Such information can be very helpful in facilitating a full understanding of the experience of the participant. Thus, after ethics approval was obtained, a one-on-one interview was conducted with each participant, with the primary strategy being to "capture the deep meaning of experience in their own words" (Marshall & Rossman, 1999, p.61).

The focus of the interviews was on the players' general experiences in breakaway situations. The overriding goal was to create a product that allows the reader to "hear the voice of another subject offering the fruits of [their] inquiry into the qualities of lived experience" (Barone, 1990, p.307) so that a deep and full understanding of these players' experiences on breakaways is reached. Probing questions were asked in the interview to investigate potential situations in which the experiences of these players in a breakaway would be different from

the general ones that they have described (e.g., would your experience change based on any game situations? Would your experience be the same if it were a play-off game?)

As a method of data collection, interviews have many strengths and weaknesses. The main strength of an interview is that it is a useful way to get large quantities of data in a relatively short period of time (Marshall & Rossman, 1999). However, since interviews require personal interaction, participant co-operation could be a concern. For instance, if the participants refuse to share aspects of their experiences or selectively provide only parts of their experiences, then the trustworthiness of the results is jeopardized. This means that the readers cannot readily trust that the description of the experience captures the full essence of the experience as it is intended to. As well, failure by the interviewer to ask the right questions could easily result in an unproductive interview. To minimize this problem, a prepared list of potential questions was used (See Appendix A). As suggested by Rubin and Rubin (1995), a limited number of questions were asked, and I listened to responses without interrupting long renditions of events, asking for more details only when there was silence, thereby attempting to teach the participants that deep and detailed answers were being sought.

A semi-structured interview style was chosen for this study because its pre-planned sequence and suggested questions allow the interviewer to be prepared to fully cover the topic being explored. At the same time, there is an "openness to changes of sequence and forms of questions in order to follow up the answer given and the stories told" (Kvale, 1996, p.124) by the participants. Since this was the first study on the topic of lived experience in breakaway situations, a fully structured interview would not have provided enough opportunity to explore parts of the experience that were not anticipated. Because this was an exploratory

study, it was necessary that there was flexibility, which allowed the participant to reveal information that could not otherwise have been revealed in answer to pre-planned questions. As well, the complete lack of guidance in an unstructured interview would have inhibited the interviewer from steering participants to tell about aspects of their experience that, based on past research have been identified as being of interest to this study. The challenge was to give the participants a chance to introduce new topics of their own in the interview, while ensuring that all of the topics that had been identified as being important got covered as well (Flick, 1998).

A debate exists in the literature as to whether an interviewer should play an active role (Cannell, Fisher, & Marquis, 1968; Holstein & Gubrium, 1995) or a passive role (Backstrom & Hursh, 1963; Converse & Schuman, 1974).

Supporters of the passive interviewer believe that by doing anything more than merely soaking up information, interviewers are contaminating data (Backstrom & Hursh, 1963). These supporters of the passive interviewer believe that by adding questions and comments, active interviewers are leading the participants to say things that they would otherwise have left out, thus altering the results. If we truly want to understand the experience of the participant without interjecting our own biases, argue the supporters of the passive interviewer, we must only follow the path that the participant takes us on.

In reality, though, attempts to remain uninvolved typically fail (Holstein & Gubrium, 1995). Cannell, Fisher, and Marquis (1968) suggested that up to 50% of what an interviewer says during an interview is not neutral. Knowing this, Holstein and Gubrium (1995) suggested that interviewers intentionally take an active role provoking narrative production.

The interviewer does not merely collect statements . . . his or her questions lead up to what aspects of a topic the subject will

address, and the interviewer's active listening and following up answers co-determines the course of the conversation. (Kvale, 1996, p.183)

Holstein and Gubrium (1995) also suggested that active interviewers take advantage of the "growing stockpile of background knowledge" (p.46) that they accumulate from one interview to the next, posing questions and exploring areas that were not explored in the early interviews.

I chose to take the role of the active interviewer (Holstein & Gubrium, 1995). As such I asked questions that provoked narrative, and I continued to use the knowledge from previous interviews to shape and direct future interviews. For instance, when one player mentioned that penalty shots are experienced very differently from regular breakaways, I began specifically asking players to describe their experiences on penalty shots as a routine part of the interview.

Interviews were conducted at the start of the preseason of the participating NHL team. Each of the 10 athletes was interviewed in a private room located in the arena in which the practice was being held. The only persons present during the interview were myself (the interviewer) and the participant. Interviews ranged from approximately one-half hour to an hour in length.

In addition to having worked with the team being studied for several months prior to this study, I spent four days with the participants, getting to know them even more prior to the interviews. During the early parts of training camp, I was at the arena for the on and off-ice sessions, interacting informally with the players. Interactions consisted of brief informal conversations as well as some formal, but unrelated, interviews. These interactions provided me with the opportunity to gain trust and respect by communicating my respect for the hockey world. Rubin and Rubin (1995) believe that this showing of respect and gaining of trust are essential to the interviewing process.

On the days of the actual interviews, I introduced myself as a graduate student who was doing research with the purpose of generating an understanding of the experience of National Hockey League forwards in breakaway situations. I also told the participants that this interview was completely separate from my work with the team, and that their participation had no effect on their status on the team. Each participant was then assured that the information provided during the interview would remain confidential unless they chose to share the results of their session with another person. I emphasized that the coaching staff would not have access to any raw data provided by them. Each participant was also informed that he would remain anonymous in the presentation of results in my thesis.

Following this introduction, players were given information sheets and asked to sign consent forms. Permission was then requested to tape record the interview. I chose to tape record interviews because recorded audiotapes help get the information down in an accurate and retrievable form (Rubin & Rubin, 1995). As well, since I was doing several interviews over a short span of time, it was very beneficial that the tapes could be stored until I had a chance to transcribe them. I think that these advantages far outweigh the disadvantages that a tape recorder presents such as adding a formal edge to an interview and requiring four to six hours of transcription time for each hour on tape (Rubin & Rubin, 1995).

Following initial interviews and the transcription of the initial interviews, some outstanding questions remained. In order to get participants to expand on and/or clarify certain concepts and ideas that were discussed in the initial interviews, follow-up interviews were scheduled. Only six players were available for follow-up interviews. The four players that did not participate in follow-up interviews were not available due to various unavoidable situations involving trades, injuries, and other unforeseeable circumstances.

The six follow-up interviews that were conducted took place after practice in a private area of the arena. The interviews were very short, approximately five to ten minutes, and consisted of only a few short questions and answers to clarify points made in the initial interviews and/or to ask questions based on information gathered from other interviews.

Data Analysis

Statements about how each participant experienced being on breakaways were identified and coded. Significant statements were then listed and treated as having equal worth. For each participant, a list of nonrepetitive, nonoverlapping statements was compiled (Creswell, 1998; Kvale, 1996).

Next, statements from the 10 interviews were arranged into the major themes which are the structures that made up their experience (Van Manen, 1990). Themes were then further categorized into smaller, more descriptive sub-groupings (See Table 6). The objective was to create a comprehensive picture of all of the significant components of the lived experience of these NHL forwards in breakaway situations. The question being asked during this process was, "Is the phenomenon still the same if we delete this theme from the description?" (Van Manen, 1990).

Based on these groupings and categories, an overall description of the essence of the experience was composed. This description of the essence of the experiences was used to facilitate the reader's understanding of the experiences in a situation that is frequently encountered by NHL forwards. Since the goal of this study was to understand what these NHL players experience on breakaways, each uniqueness in experience was noted and described. The end goal was to create a rich description of what these NHL players experienced on breakaways so that the reader "learns from the re-created other in the text to see features of a social reality that may have gone previously unnoticed" (Barone, 1990, p.314).

Table 6

Major Themes and Subcategories of The Breakaway Experience*Perceived Physiological Change*

- Physiological Activation
- Muscular Tension

Affective Changes

- Anxiety
- Excitement
- Relaxed Intensity
- Mixed Emotions

Feeling that Time Has/Hasn't Changed

- Time Slows Down
- Time Speeds Up
- Time At Regular Speed

Factors That Influence the Experience

- Confidence
- Sense of Security in Their Position
- Game Score/Time
- Playoffs
- Location
- Penalty Shot

Cognition

- Tactical Focus
- Temporal Cognitive Focus
- Distracting Thoughts
- Positive Thoughts

Attention

- Crowd
- Comments From Coaches and Bench
- Player Positioning
- Sense of Responsibility

Issue of Feeling in Control

- Perception of Control
- Perception of Control In Certain Conditions
- Perception of Not Being in Control

Note. Major themes appear in *italics* while subcategories appear in regular print.

With this deeper understanding, sport psychologists may be more aware of important factors involved in breakaway experiences, thus preparing them for potential issues and challenges that players may present to them. Coaches can use information in this study to create drills and plays that would help players to use aspects of their experience to help them score on breakaways. For example, if coaches know that a large part of the players' experiences on breakaways

involve evaluating the goalie's positioning and weaknesses, perhaps they would spend time prior to games watching tapes of the goalie and pointing out his tendencies. They could also point out the best places to shoot when the goalie is in certain positions.

Finally, results and categories were shared with another researcher who is familiar with the field of sport psychology in hockey. As a peer debriefer (Lincoln & Guba, 1985), he was asked to examine the results, looking for identical patterns (Creswell, 1998), and to comment upon the trustworthiness of the categories and resulting description of the essence of the experience. Discrepancies between my categorizations and his suggestions were discussed at length until both researchers came to an agreement about the resulting description and categorization of the experience of NHL players in breakaway situations. In this sense, the peer debriefer served somewhat like a devil's advocate.

The categories were designed to facilitate a full understanding of the main parts constituting the experiences of the participants on breakaways. As Barone (1990) noted, however, the reader must expect to "face the anxieties inherent in the use of personal judgment" (p.318) because narratives will inevitably be filled with ambiguity and gaps in meaning. Participants are attempting to explain their experience, however, their descriptions may not be as full or well-articulated as we would like. Each participant has a different ability to verbalize his or her experience, and many people struggle to clearly describe certain aspects of the experience. The clarity and lack of ambiguity of the resulting descriptions depend directly on the verbal expressive abilities of the participant. This is an inevitable part of working with humans - we are not perfect, and thus our descriptions tend to be imperfect as well.

A final step in verification consisted of having the forwards read the themes and final description of their experiences that were composed and provide

feedback based on the accuracy with which the themes described their experience in breakaway situations. This process, called member checking, is thought by some researchers to be essential to the process (Erlandson, 1993; Sparkes, 1998). Without this final step, the trustworthiness of the study is questionable, and one can only hope that he or she has captured the experience as it was lived (Dale, 1996). Only six players were available for this step. The same four players that were not available for the follow-up interviews were also unavailable for the feedback session for the same reasons.

Due to time constraints and the practical difficulty of co-ordinating the schedules of the six remaining participants, individual sessions were conducted to allow participants to check the trustworthiness of the description that was compiled. Participants were given the description of their experiences that appears in the results section and asked which parts did not fit for them, which parts did fit for them, and what was missing from the description.

All of the participants reported that the description included all elements of their experience and that there was nothing more that they would add to the description. This provides evidence for the trustworthiness of the description that is presented in the results and discussion section of this paper. This next section will reveal the different components of the breakaway experience as they were explained by the participants.

Results and Discussion

The range of possible experiences on breakaways appears to be great, given the variability of the experiences of the players in this study. To highlight what might be experienced at two extremes, descriptions were compiled based on information provided by players in this study. At one extreme, a player with low self-confidence and a lack of security in his position on the team may experience something like this:

The puck is on my stick. I look around - darn, I am all alone. There's nobody near me, no chance of getting out of this breakaway. I can hear the fans yelling. They all expect me to score. This is so much pressure! My hands are gripping my stick so tight. My whole body feels tight. Come on, legs, get going. They're going to catch me. I can hear their strides catching me. I can feel them breathing on my neck. Adrenaline is pumping through my veins and my heart is racing. I am so nervous. I'd better score. I know coach expects me to score. I missed the net on that 2-on-1 in the second period. My shot is way off today. If I screw up, coach will send me down to the minors. I'm getting even more tense. This feels so unnatural. I'm scanning my brain - come on, think. What am I going to do? What does this goalie usually do on breakaways? Oh, no, this goalie has the best save percentage in the league. Okay, watch where he's moving. Darn, I can't think of what he usually does. Oh, no! Okay, he's giving me top corner blocker side. I've got to shoot high. I'd better not miss the net, or I'll look like a big idiot. I'm never going to score. Things are happening so fast. Aaahhh! I feel like someone hit fast forward! What should I do? I have to score to tie the game. The whole team is depending on me. I can't screw up now. Oh, no! I missed. I'm going to get cut for sure. They all think I can't play here.

At the other extreme, a player with high self-confidence and a strong sense of security in his position on the team would likely experience something entirely different on breakaways. Based on what the players in the present study described, this confident, secure player may experience something like this:

Alright, I've got the puck. Yes! There's nobody near me. It's just me and the goalie! I'm going to score! This goalie has no chance!

Alright, now, slow things down. Good. I am free-flowing. I've got a good shot of adrenaline rushing through my veins - excellent, I'm feeling lots of energy! I am so excited! It's like a sense of euphoria sweeping over me. I love breakaways! Alright, it's Tim in net. He always goes down and gives the shooter top corner. I've just got to out-wait him. Fate is in my hands. I'll use my trusty fake - it works every time! I hear the noise level go up. The fans are cheering for me! They know I was in perfect position to get this breakaway. I can make Tim drop to his knees. Wait . . . Wait . . . Fake the shot. Excellent, he's down. Look up and see the hole he left in the top part of the net. Perfect. Feeling good. It's like I've been here a million times before. Nice and easy. Just like I can . . . Score!

These descriptions give a sense of the ends of the continuum of players' experiences on breakaways. What follows is a description and discussion of the actual experiences of each player in this study. Based on the information provided by the players in the interviews, thick descriptions of their experiences were composed. These descriptions are presented in this section in categories and subcategories that help to organize the elements of the breakaway experience to facilitate understanding.

When describing their experiences on breakaways, the players spoke of many aspects of the experience (See Table 6). They reported a noticeable perceived physiological change, a sense of control or lack thereof, a sense of time changing either to slow things down or speed things up, and an awareness of the crowd. They also addressed the issue of what they were thinking, what they were aware of, and what factors would change their experience on a breakaway. These factors included the time and score of the game, whether it was playoffs or regular season, whether they were playing at home or away, whether they felt that their position on the team was secure, and most importantly, whether they felt confident or not. A final factor that the players felt was noteworthy was the situation of getting a penalty shot. They were quite insistent that a penalty shot is experienced very differently from a breakaway. Each of these elements of the

breakaway experience will be presented and discussed in depth throughout the remainder of this section. Each category and subcategory reveals an element of the breakaway experience that was reported by the players and deemed by the researcher to be a major component of their experience.

Perceived Physiological Changes

Physiological activation. When asked to describe their experience of being on a breakaway, all of the participants reported a distinct physiological change. They all reported feeling a rush of emotion when they were on a breakaway. They reported these physiological changes as being key to the experience of being on a breakaway:

The adrenaline is there. You are thinking oh my God, your eyes light up your heart races, you know I love breakaways, something you always want, just you and the goalie. It is kinda get out of jail on a free card. . . your adrenaline is flowing up, high energy, my heart is racing, the adrenaline is flowing . . . (Bob)

Ah there is definitely a shot of adrenaline because you know that it doesn't happen very often . . . now you don't feel that maybe if you are tired . . . (Earl)

I don't think there is anything like the adrenaline rush like being on a breakaway . . . That is one of the reasons you play hockey, to have that adrenaline rush . . . (Gavin)

It is an adrenaline rush for sure, it is kind of a build up and then if you score it goes up that much higher and if you don't it is kind of a let down. (Ian)

Your energy is probably going up and you are enjoying the split second or the couple seconds you are actually on the breakaway. (Jerry)

Earl's decision to cite the fact that he feels a rush of adrenaline because breakaways do not happen very often may coincide with the hypothesis of Martens, Vealey, and Burton (1990) who suggested that levels of state anxiety are

positively correlated to perceived importance of the outcome of the activity and perceived uncertainty of the outcome. This player does not indicate whether this rush of adrenaline is anxiety-related, however the consequences of an adrenaline rush, that is, increased heart rate and sweating, are often linked to the experience of anxiety (Salame, 1984).

Furthermore, the mention of the rarity of breakaways and the fact that most forwards are paid a salary that reflects the number of goals they score would support the notion that perceived importance of the outcome of a breakaway would be high. Research finding that perceived importance of the outcome was closely related to levels of somatic anxiety (as measured by CSAI-2) for golfers (Marchant, Morris, & Anderson, 1997) supports the notion that the perceived importance of breakaways would likely lead to an increased experience of somatic anxiety.

The word "adrenaline" was mentioned by several players. It was interesting to watch their expressions as they spoke of the adrenaline rush. As an interviewer, a sense of rush was felt as the recollections were shared. This may or may not correlate with the chemical adrenaline, but it does capture a common sensation.

Muscular tension. Players using the words "anxious" or "nervous" to describe their experience were also inclined to describe a sense of tension in various parts of their body. This was a common part of the recollection of the somatic portion of their anxious experience on breakaways:

I know I feel tense and I feel like I am not skating as fast as I could be, like I am trying to move my legs too fast but it is actually slowing me down. That is how I feel . . . I feel like I am getting caught all the time. So that is affecting your thoughts again, too is I am going to get caught, I am going too slow . . . [Tension is mostly in my] arms, arms and legs . . . Pressure. (Ian)

You know you feel more nervous than you normally would under normal situations so definitely you feel your body get a little more tense . . . you feel a little more pressure, you feel a little more

nervous than you sometime you don't have that free flowing like you normally do. (Dexter)

Ya, you know you don't have a lot of time, but for that split second that you know you have it, you go oh my god it is a breakaway and everything gets tight. (Harry)

Dexter's statement that he did not feel "free flowing" could certainly lend support to the contention that anxiety has debilitating effects on performance, as put forth by Dunn and Nielsen (1996), Lewthwaite (1990), and Paterson and Neufeld (1987). It would seem logical to postulate that feeling tense and lacking of the feeling of "free flowing" would inhibit the fluidity of motion and thus result in a performance decrement on a breakaway. For a sport psychologist, this information might suggest that Dexter could benefit from a progressive relaxation program so that he is able to relax his body on command in situations such as breakaways. This would allow Dexter to get back that feeling of being "free flowing," making a breakaway feel more natural and allowing him to perform more like he does in less intense situations such as practice.

Affective Changes

Every player reported an increase in emotion/intensity, but they did not all agree on the type of emotional change that they were experiencing. Players reported either an experience of anxiety, excitement, relaxed intensity, or mixed emotions while they were on breakaways.

Anxiety. Three of the players used the words anxious or nervous to describe their emotional change. One of these players reported:

It is a bit of a nerve racking position to be in because you are one on one with the goalie and everyone is watching, and you try not to think of things like that, but it is nerve racking. (Gavin)

The other two players using the words anxious or nervous simply said that they experience nervousness on breakaways. For Gavin and these other two players, this sense of nervousness appeared to be a central component of their breakaway

experiences. The sense of nervousness was one of the first things that these players described about their breakaway experiences.

Knowing how central anxiety can be to the breakaway experience, sport psychologists can equip athletes with effective progressive relaxation skills to help them to reduce this anxiety. As we know from the research, experiencing anxiety can be debilitating to performance.

Gavin's comment about trying not to think about some of the things that he associates with his anxiety reinforces the idea that experiencing anxiety may be undesirable for athletes. Based on Gavin's report of not wanting to be thinking these thoughts, sport psychologists may be well-advised to provide athletes with thought-control strategies.

Excitement. Four players described their experiences on breakaways as being exciting:

Well, I guess there is definitely a feeling of excitement . . . It is almost like a sick sense. I can't really describe what, if it is in my stomach, or if it's like knowing that things are going to happen quick. You are going to have to get it and go. It an intense feeling and ah it is a lot different than let's say you were backchecking on someone and you feel like they are going to score on you, it is a feeling that you gotta get going, someone is going to be right there. I can't really describe what it is like. (Earl)

Well you just get extremely excited it is like a sense of euphoria come across your body just adrenaline rush. (Charlie)

It is not the normal feeling you have throughout the game, I think maybe you have a little bit of anticipation and excitement if you are having a breakaway and a chance to score. (Fred)

I would say is is exciting and fun, I think it is what an offensive player enjoys. You don't get a situation like that every two minutes, it is something you have to work for and it is something that happens because you get in that position. (Jerry)

It is interesting to note that Jerry reported feeling excitement as a result of knowing that a breakaway is a rare opportunity. For Jerry, the fact that breakaways are rare appears to contribute to his experience. This, again, would imply a perceived importance of the outcome of the breakaway, yet this player reports feeling that breakaways are exciting and fun. This is contrary to research by Marchant et al. (1997) and Martens et al. (1990), which found a strong positive correlation between perceived importance and levels of anxiety experienced.

Jerry also seems to be linking his hard work to his breakaway experience. Perhaps the fact that this player mentions that breakaways result from hard work and proper positioning implies that he feels that it is almost a bonus that he got a breakaway. It may also indicate that he feels that he did many things right to earn this opportunity and therefore that the outcome of the breakaway is not the only focus of the experience, thus reducing the perceived importance. More research would be necessary, however, before any solid conclusions on this issue can be reached.

Earl and Fred agreed that the excitement that they experience on breakaways is different than the feelings that they have throughout the game. Based on this, it is evident that mental preparation for breakaways may have to be slightly different than mental preparation for other game situations in order to take into account this unique feeling of excitement being described by these players.

Relaxed Intensity. Another player described something that was neither anxious or excited:

It's almost like a relaxed intensity . . . It's like you are in control, you're strong, but you're laid back so you're not overdoing it.
(Albert)

This idea of relaxed intensity, and the apparent low level of effort

and high sense of control falls in line with research on flow (Csikszentmihalyi, 1975, 1990; Jackson, 1996; Jackson & Csikszentmihalyi, 1999), which suggests that one of the nine characteristics of the experience of flow is the feeling that one is in control without having to actively try to be in control.

Mixed emotions. Two of the players described their experiences on breakaways as a combination of anxiety and excitement:

It is a great feeling. That is one of the reasons you play hockey, to have that adrenaline rush, to have that anxiousness, that excitement. That is why you play the game . . . it is a combination between excitement and anxiety, kinda all together there. (Gavin)

Your body you are more into it you feel more adrenaline than you normally do . . . I would call it nervous excitement maybe.
(Dexter)

Interestingly, the increase in emotion and intensity is an enjoyable part of Gavin's experience. In light of his use of the word "anxious" in his description of his experience, this word clearly does not have negative connotations for Gavin. This is contrary to our definition of anxiety as having negative affective effects (p.5).

Interestingly, the players all reported similar physiological changes, but they used different words to describe these changes. The issue arises as to whether the players are using different definitions of the same word, or different words to capture the same underlying meaning, or whether they are using different words to mean different things. One cannot help but wonder whether what one athlete calls anxiety is the exact same thing that another athlete labels excitement. Perhaps the key to this apparent contradiction in experiences is the skills/challenge balance (Csikszentmihalyi, 1975, 1990; Jackson, 1996; Jackson & Csikszentmihalyi, 1996) that may be perceived on a breakaway by some players, resulting in an experience of flow, and a demand/resource imbalance (Lewthwaite, 1990), resulting in anxiety for other players.

Perhaps more skilled players correctly perceive that they have high skill levels that match the challenges inherent in a breakaway, thus enabling them to experience flow. Perhaps less skilled players have a history of failing to score on breakaways, thus causing them to perceive breakaways as threatening and to experience anxiety as a result. Another possible framework for explaining differences in experience could be that if the player experiences success on his first few breakaways, regardless of his actual skill level, he will perceive himself to have a high level of skill. This perception would then facilitate his experiencing of "flow" on future breakaways, resulting in good performances and more success. With each success, confidence would grow, further facilitating flow. Conversely, if the player fails to score on his first few breakaways, he perceives his skills as being insufficient to meet the challenges of being on a breakaway, thus preventing him from experiencing flow on future breakaways and causing him to perceive breakaways as personally threatening, resulting in an experience of anxiety. This might negatively affect performance on breakaways, which could further reduce his perceived skill level. Perhaps whatever cycle a player starts off continues to perpetuate itself throughout his career unless a coach or sport psychologist intervenes, for example, to teach him skills such as visualization, relaxation, thought stopping, and positive thinking.

The Feeling That Time Has/Has Not Changed

This category is directly related to the research on flow (Csikszentmihalyi, 1975, 1990; Jackson, 1996; Jackson & Csikszentmihalyi, 1999) that cites a disorientation of time as a major characteristic of the flow experience. This feeling of transformation of time was reported by 29% of elite athletes in a qualitative study by Jackson (1996). Four of the players reported that time appeared to change when they were on a breakaway. They reported that time either felt like it was speeding up or slowing down.

Perception that time slows down. Three of the players reported a sense of time slowing down when they are on breakaways:

For me things seem to slow down which is probably a good thing. I know I talked to some guys and they say things seem to speed up . . . I am fortunate so I can relax under that kind of pressure and take it slowly and maintain your speed . . . The good players or the players who have experience with it that can calm it down and feel like everything is in slow motion . . . (Harry)

Normal speed until you get tight up to the net and then it slows down a little bit. (Charlie)

Things happen a little slower but you feel fast yourself [when you're confident] . . . everything happens quickly, you feel like you are a step behind things like that [when you're not confident]. (Gavin)

Clearly, Gavin appears to be making the link between whether he experiences a speeding up or slowing down of time to his confidence levels. Harry experiences the perceived slowing of time as being helpful and desirable when on breakaways.

Perception that time speeds up. Only one player reported feeling as though time was speeding up when he was on a breakaway:

Yeah . . . Things definitely speed up . . . It's like things are going so fast, you gotta think right now or else, boom, it's over. It's a really fast thing. It's hard to describe, but it feels like you hit fast forward. Your mind is just spinning to try to keep up. (Ian)

What Ian describes sounds like a state of panic. He perceives this sensation that time is speeding by as being central to his experience on breakaways.

Perception that time stays at regular speed. One of the players reported that time stayed at regular speed when he was on breakaways. He noted that "it is going the speed it is actually going, but it is actually very fast" (Fred).

The remaining five players did not indicate whether time sped up, slowed down, or remained the same in their perspective when they were on a breakaway.

Based on the players' reports, it appears as though there is a sense of calmness and composure associated with the sensation that time slows down, while there is a sense of panic associated with the sensation that time speeds up. The stark contrast in tone that was evident as the players told their stories of time changing was worth noting. Ian spoke very quickly, with a sense of urgency, as he described how time felt like it sped up for him on breakaways. Conversely, there was a sense of composure and comfort as Harry, Charles and Gavin explained their experiences of time slowing down. Ian appeared rather uncomfortable and on edge, shifting and fidgeting as he spoke in this section of the interview, suggesting to me that this sensation that time is speeding up may be linked to anxiety and resulting performance decrements for him.

Cognition

Cognition refers to "the mental processes involved in acquiring knowledge . . . Cognition involves thinking or conscious experience" (Weiten, 1998, p.14). For purposes of this discussion, this will be the definition of cognition used.

When describing their experiences on breakaways, all of the players included rich descriptions of what they were thinking - that is, their cognitions. Although specific contents of the players' cognitions were not identical, it was clear that whatever their cognitions were, they played a significant part in their breakaway experiences. In order to fully understand a person's experience, it can be argued, we would want to know what he was thinking during the experience. Cognitions provide insights into a person's perceptions and how they make meaning from a given situation.

Tactical focus. All of the players reported that their thoughts were consumed mostly with strategy. They reported spending most of the time on a breakaway considering what move to make based on positioning of the goalie, personal preferences on breakaways, past experiences, and the goaltender's past tendencies:

I want to know how far, if that guy is going to catch me, I may not be able to get a deek off, get the shot off you know, so you have to depend on the guys behind you, you know . . . I quickly look up, see if the goalie is in his position, see if he is coming out, see if he is standing still, like in his regular position, and if I see that he is not moving anywhere then I decide to make my move, okay if he is in tight I may go upstairs or shoot low, but if he is coming out and back in, I am going to deek him. (Bob)

The first thing I do is look up and see where the goalie is, see if he is coming out or if he is deep in his net, depending on that situation, then you decide what you are going to do. (Charlie)

This next player reported using the same move most times, although he also reported considering the goalie's vulnerabilities when deciding what to do on a breakaway:

Well I think when you first realize you are on a breakaway a flash goes in your head of things that because a lot of times you do the same move or you shoot the same place so I think that goes through your head first but then once you get in closer to the goalie, then I think you kinda react on instinct but most of the time you end up doing the same moves that you have done before, so right at first when I think you are on a breakaway you think of where the goalie is vulnerable but then when you get in you react more on instinct . . . I don't know if you think a lot. Something just flashes through your head. (Dexter)

The main focus is finding the goalie, really . . . You kinda see where the goalie is, then decide where I am going to shoot or deek and if I am going to shoot, look for a spot to shoot at. If I am going to deek, I have to decide what kind of deek I am going to use, forehand or backhand. (Fred)

I think when you get a breakaway things happen real quick so some of the time you don't get time to think, you just look up and see where the goalie is and look for a place to shoot or if he is out of his net look to deek but if you have a little time if you are like the red line in, your thinking, maybe being aware of where the guy is behind you, and then if you have breakaway speed for me personally you want to move in as quickly as possibly so I can make a quick move, and I think for most you are aware of where the goalie is in his net, and then if he is back in his net, you look for an opening to shoot, and then maybe a fake first and then a quick shot, if he is out of his net maybe a fake one side and give him a deek. (Gavin)

It was interesting to note the increase in the speed of their speech and the sense of urgency in their voices as the players described their thoughts. They spoke with animation, almost as though they were attempting to talk through their thoughts just as they would happen on a breakaway. Speed of thought came across as a central aspect of their breakaway experience.

Rushall (1984) found that a narrow, internal focus on technical performance leads to improved performance. Mallett and Hanrahan (1997) also found that increasing task-focused/strategic thoughts in sprinters resulted in improved and more consistent performances. Perhaps the fact that strategy dominated their thoughts helped the players to increase their performance enough to allow them to play at the NHL level.

The following player articulated a complex thought process that he experienced on breakaways. He reported choosing a move early, based on the goalie's tendencies and positioning, and then going with his instincts as he gets more into the situation:

The main thing is to look at the net and not at the goalie, looking at the holes where you can score and I think at a certain time when you are coming in on him you know exactly what you are going to do when you are in on him, you are going to see where he is, then you can decide whether you are going to deek or shoot . . . It is an early decision where he is and what you are going to do, I usually like to decide right when I step into the blue line what type of

move I am going to do or if I am going to shoot. I mean you can always change your decision when you are in the hashmarks if he decides to go down or tries to poke check you it is just a split decision you don't have much time to actually realize what you are doing . . . Ya it is a little bit of a strategic thing but it is more of an instinct thing I think you practice breakaways all practice long and when you get in the game it is a different mentally because you only have one chance to score and the main thing is you want to hit the net, you don't want to miss the net by looking how you are going to shoot, or how you are going to deek you are most likely not going to miss the net . . . Oh yeah, it is like you know his [goalie's] weaknesses, you know his strengths, you know what he does on breakaways, you know what he does on everything, you can relate to that like a pitcher knowing the batter what he does is the same thing in our sport as hockey players know what the goalie is going to do. (Jerry)

This reported tactical focus is not surprising in light of previous research. Most players in this study reported that task-relevant thoughts, or performance cues, dominated their cognitions while they were on breakaways. This might be expected of such elite athletes based on findings that instructional self-talk is more effective than motivational self-talk when the task requires fine motor movements (Theodorakis, Weinberg, Matsis, Douma, & Kazakas, 2000). It would seem logical to infer that athletes at this elite level would use effective thought strategies. The findings of this study provide support for this inference.

As well, this tactical focus could be evidence of a complete absorption in the task and total concentration on the task being performed. These are characteristics of flow (Csikszentmihalyi, 1975, 1990; Jackson, 1996; Jackson & Csikszentmihalyi, 1999), which could lend support to the notion that the experience of being on breakaways for these players is one of being in flow.

Jerry's extensive description of how he considers who the goalie is and what the goalie's known strengths and weaknesses are and knowing what the goalie tends to do on breakaways implies that his prior experience and preparation play a key role in reducing the uncertainty of a breakaway. Based on

research by Marchant et al. (1997) and Lox (1992) that found that levels of cognitive anxiety were positively correlated to levels perceived uncertainty, this may lead one to believe that perhaps this reduced uncertainty as a result of experience and preparation assists in reducing anxiety experienced on breakaways.

Temporal cognitive focus. When asked which tense (past, present, or future) their thoughts were focused in, most of the players reported focusing their thoughts in each tense at some point as they go through the breakaway experience. Some found that their thoughts were focused in one of the time frames completely:

Well, in a breakaway you are thinking how to outsmart the goalie, how to outdo him, so I guess if he has stopped you before and you are coming in again you are going to know what he is going to do. If you're going on an upstairs situation, you're thinking of the past. If you are going to shoot, that is the present. And the future, sure you want the puck to go in, so if it goes in, that's the future, sure. (Albert)

I think when I am doing well and confident I am thinking about the present because I think I am going to score, I know I am going to score. When I am not doing well, I am thinking about the one I missed and the one I screwed up on. So I definitely think it depends on your confidence level. (Earl)

Clearly, past experiences play a significant role in determining Albert's and Earl's cognitive experiences on breakaways. These thoughts focused on past experiences help Albert to know what the goalie will likely do, thus influencing his strategic thinking as well.

Mostly the present, I think you have a little of the past, just knowing what the goalie is, knowing what the goalie likes to do. (Fred)

Present and future. You think of the outcome a little bit, oh God if I score here you know, it is going to be a big deal, we are going to

up by 2 goals, or you are thinking a little about the future, but you are trying not to, but you can't help it . . . And the past comes in to play a little bit if you had a breakaway already. Other than that I don't think you think about the past. (Harry)

Future probably. Just what I am going to do on a breakaway. I think about that as soon as I get on a breakaway. (Ian)

I would say a little bit of each, while I am there it is probably the present, what you are going to do to score I think you think about it in the past about your confidence and about what you have done that has worked whether it has been in a practice or a game . . . and what the goalie is doing and how you handled that before in practice or games. And you think about the present about what you are going to do and the future of how the outcome is going to be. (Jerry)

For these players, it appears as though thoughts of past experience play a helpful role. Knowing that these players tended to scan their memories for plays that worked and did not work on past breakaways, we should encourage mental skills practice to facilitate such scanning. As a practitioner, it appears that it may be useful to encourage players to visualize past successful breakaways (particularly against the given goaltender) before games. This may make memories more readily available in the split second that the player scans his memory while he is on a breakaway.

Distracting thoughts. Interestingly, Earl's report of past-focused thoughts implies that past thoughts are somewhat distracting for him. In spite of the dominance of strategic thoughts, many of the other players also reported having non-strategic thoughts throughout the course of their experience on a breakaway. These non-strategic thoughts were often reported as being quite distracting and negative:

Oh, yeah, your thoughts are not so great [when you have low confidence]. Oh, no, what did I do, those are different thoughts. I mean, whereas before you are confident of what you do,

afterwards you're like, mmm, that doesn't work anymore, what should I do, and stuff like that. (Albert)

If you are not focused for the game . . . I missed on him the last time, you know if you are not focused, negative thoughts run through your head . . . your mind changes. (Bob)

If you have been in that situation and you haven't scored, obviously you would have negative thoughts that could hinder your chances. (Charlie)

Non-strategic thoughts were reportedly related to previous events in the game, confidence levels, and whether or not the players were focused for the game. The notion that occurrence of negative thoughts is related to past experiences is consistent with research by Martens and Gill (1977) that found that state anxiety levels increase as failures occurred and decreases as successes occurred. It is interesting that a few quick, non-strategic thoughts appear to be as important to the breakaway experience as the many strategic thoughts that occur during the experience:

If you are a confident player you do what you want to do you just rely on your instincts, you're not afraid of making mistakes, you feel that any decision you make is a good decision, where if you are not confident in yourself you are questioning every move you make out there . . . you're thinking if I mess up I am not going to play. (Dexter)

Yes I guess when you score they are thoughts you want to have you are basically, you are not thinking you are going to miss. You are thinking I am going to score . . . There are certain times when maybe I haven't scored in a while and my confidence isn't there, a quick flash of don't screw this up you know what I mean. I know for me confidence is a huge thing. (Earl)

I don't get a lot of breakaways but when I do I don't usually score. So that is what is going on in my mind right now. I feel like I have pressure to score because I haven't done that before . . . Ya, I got to get this one. (Ian)

Ian appears to be experiencing a link between his distracting thoughts and the pressure that he feels on breakaways. The other players reported that when they did experience cognitive interference it was composed of worries about failing to score, and worries about negative evaluations from coaches and teammates. This finding coincides with the results of a study on collegiate hockey players that found that players were more inclined to worry about performance failure and negative social evaluation than situational uncertainties and potential injury or physical danger (Dunn, 1999). In line with this finding, there were no reports of worries about potential injury in the present study.

The one variable that the players noted as contributing to the presence of negative thoughts is low confidence. They were clear that negative, non-strategic thoughts are an aspect of some breakaways when their confidence is low, but not an aspect of breakaways when they feel confident.

Positive thoughts. Although most players reported that their non-strategic thoughts tended to be negative and inhibiting, one player also reported a strong presence of positive thoughts on all of his breakaways:

I think when you are a player you don't want to make a mistake, you want to score a goal and help your team out and as you are coming in on a breakaway the only thing on your mind is I am going to score but it is just which way . . . but like I said when you are coming down you know it is such a split second for me I know I come in and I think of where I am going to score not if I am going to make a mistake or miss. (Jerry)

Jerry's animation and assuredness as he spoke of these positive thoughts implied that his experience on breakaways is greatly shaped by these thoughts.

Attention

For purposes of this discussion, the "spotlight theory" will be used to define attention. According to this theory, attention is "like a spotlight that illuminates different parts of the external environment or various mental

processes" (Moran, 1996, p.41). According to Moran, the concept of attention does not necessarily imply a mental effort. The participants spoke about many different things that were in their attentional spotlight while they were on breakaways, including the crowd, feedback from their coaches and teammates, player positioning on the ice, and a sense of responsibility.

Crowd. One of the things that most of the players mentioned was the awareness of the crowd and the noise that the crowd was making. This awareness, however, did not include an awareness of specific individuals or of exactly what was being said:

I can hear the crowd usually when I get on a breakaway, I usually don't hear the crowd when I am in the game like when I am just skating around, but when I get on a breakaway I kind of hear the rise of the crowd . . . I just hear the pitch getting louder and louder, I don't hear people yelling, I don't hear individual people. (Ian)

You hear fans, or the puck moving, you look around and you hear people . . . well, it's not like I'm hearing them, it is just the sound of the game. Like we are talking and I hear the zamboni. (Albert)

You know that they [the crowd] are there, but you are not really paying attention . . . You know they are there in the back of your head, but you are focused on putting the puck in the net. (Bob)

I think you hear the crowd, but it's not something you focus on . . . if you're at home, people are going to, you know . . . I don't think you hear anything specific, just volume. (Charlie)

The noise gets louder . . . It is basically the crowd noise and you drown everything else out. (Gavin)

Ya, I guess not much but you know they are there, in the back of your mind you know they are there, it is part of the game you learn to not really block it out but just kind of understand they are there. (Jerry)

This awareness of the crowd without having a specific awareness of what the individual members of the crowd were saying is consistent with the flow

experience (Jackson, 1996). Jackson, in her qualitative investigation on the experience of flow for elite athletes, found that a commonly cited theme was this awareness of the crowd and the noise without being aware of the specifics.

One player reported a very different experience with the crowd noise when he was on breakaways. He reported not hearing the crowd at all when things were going well for him:

I guess it goes back to when you don't hear anything when you are in the zone. You don't hear the crowd. You don't hear maybe a guy behind you, maybe trying to jinx you out or stuff. When you don't hear any of that, when you are not you definitely hear the crowd, you definitely hear the guy skating behind you, you definitely hear a guy yelling he is open. You definitely hear a lot of things. (Earl)

For this player, perhaps his lack of awareness of the crowd is a result of his total absorption in the task. Perhaps he is so totally absorbed in being on a breakaway, that he does not have enough space in his attentional storage (Moran, 1996) for the noise of the crowd.

Knowing that some players are aware of crowd noise while others are not is a useful starting point for sport psychologists. It prepares us for the possibility that dealing with the crowd noise may be an issue that needs to be addressed for some players. It may be useful to determine whether the client who hears the crowd noise perceives it as being facilitative or debilitating.

Based on this differing degree of awareness of crowd noises, we may presume that players would have differing degrees of awareness of other noises. One such noise is the feedback and commands being given by coaches and teammates.

Comments from coaches and teammates. Another sound that many of the players reported hearing while they were on a breakaway was the yelling from their coaches and players on their bench. The yelling that they hear is often

reported as being instructive and/or informative and relevant to their strategy on the breakaway:

You are half listening for the bench [yelling] he is on your tail . . .
You are in alone. (Bob)

If the guy is yelling shoot the guy is right on you and there is not much time left in the game . . . you hear those things. (Harry)

Possibly early, when you first get the puck, [you hear the coaches yell] if there is somebody on you or if not, you may hear if you have time . . . something like that, but once you get in tight, no. Once you are in the hash marks, you don't hear anything. (Charlie)

If they are yelling you have a man with you, you understand that and you create a 2 on 0. If they are yelling shoot because there is only 10 seconds left or 5 seconds left, you have to know that as a hockey player. (Jerry)

Player positioning on the ice. The players also reported being aware of the positioning of the other players on the ice. They reported being focused on the positioning of their teammates insofar as they might be able to create a two-on-one, and they report being aware of the defenders that are closest to them. The distance between the player on the breakaway and the nearest defender is reported as playing heavily on their awareness:

Ya depending on if the guy, that is why you are looking around first, if the guy is right on your back, then you know you are going to get caught, if you are flat footed and he got his feet up and you know you are going to get caught, maybe you will try to slow up and wait for a teammate to come and make it a two on one.
(Gavin)

[I am aware of] how close the defender is on you, how much room you have, what the goalie is giving you . . . (Harry)

I am more aware of the defensemen chasing me. I am basically not thinking of where my teammates are because I know is that I want to get to the net as fast as I can and make a goal. (Ian)

You have to depend on the guys behind you, you know . . . not looking back just kinda feel the senses you know you hear the ice someone coming behind you, you can feel breathing. (Bob)

I think mostly you are aware if there is pressure behind you or not . . . how fast you are going, your speed you are coming in at and where the goalie is situated. That is about it, really. (Charlie)

Dexter reported a strong awareness of being alone, followed by a sense of tunnel vision as he focused in on the goalie:

Well, I think first of all, you are aware that you are by yourself , you don't see anyone in front of you , you don't hear anyone beside you, you just realize, it just all comes together that you are alone, and then I think you kinda get a tunnel vision, you zero in on the goalie, and you raise to go towards him, I think everything else is, you are just focused in on that, everything else is kinda non-existent. (Dexter)

One player reported an acute awareness of where each player was on the ice. He also reported feeling that this extra awareness was a characteristic that may distinguish NHL players from players at other levels:

Whether it is where your teammates are in case you can create a 2 on 0, or how close your opponents are from chasing you, if you can take your time or if you have to breakaway from them, what the goalie is going to do . . . I mean there is so many things you have to be aware of, I mean a good hockey player can tell you where every player is on the ice behind him even though he is on a breakaway. (Jerry)

Sense of responsibility. When asked if they felt any sense of responsibility while on a breakaway, the answers varied. Three of the players indicated that they were aware of a sense of responsibility while they were on a breakaway. One of these players indicated feeling a sense of responsibility to do his best, while two players reported feeling a sense of responsibility toward his team. These players indicated that this sense of responsibility affected their breakaway experience by making them feel added pressure and tension:

Yeah, like people expect you to score once you get on a breakaway and I think it is less than fifty percent on breakaways, so but people still have that expectation that you should score when you get on a breakaway. (Ian)

I think in the back of your mind, that is why you feel a little anxious, you feel like everyone is watching you, you don't want to let the team down by cashing in on your opportunity you want to help out the team, especially when you get a situation like that, you don't want to waste those opportunities. (Gavin)

Well, you hope to score. Your teammates and your coach would like to see you score, but it's opportunity. Nothing is guaranteed, especially in hockey, so no one is going to be disappointed if you don't score as long as everyone is going to do the best they can. That is all they ask . . . You feel a sense of responsibility to do your best. (Charlie)

Maybe self consciously, but not you are not thinking I have to score this for the team, but you know that is the pressure you are feeling as well. (Harry)

For Ian, the sense of responsibility is linked to his perception that he is expected to score on breakaways. Conversely, Charlie reports that he perceives that he is not expected to score and that no one would be disappointed if he did not score on breakaways. There was a clear sense that perceived expectation played a key role in influencing the breakaway experience of Ian.

Four of the players reported not feeling any sense of responsibility when they were on a breakaway. Some players, however, indicated that they did feel a sense of responsibility to their team for the result of the breakaway after their breakaway was finished:

Of course . . . of course if you don't get a breakaway you don't score, you'll be mad at yourself, and if your team doesn't win the game, sure you are going to feel the responsibility. I mean, I could have won the game, but I don't know if it sits in your head for so long and eventually goes away. But, as I am on the breakaway, I am not thinking about what are people thinking. (Albert)

I don't know if you feel responsibility, I know if you do miss you feel like you let your team down for whatever reasons because I think it is just you it is not anybody else, a team game goes to an individual game in a hurry so I think maybe that way but . . . maybe I think later. (Dexter)

Earl articulated feeling as though his earning a breakaway was beyond what is expected and that he did not feel as though anyone else would be disappointed if he didn't capitalize on the chance because he created it himself:

No it is something you have put yourself in a position to get the breakaway. You are not going to disappoint anyone by not putting the puck in the net or by making a mistake you are the one in the position. (Earl)

There appears to be a consensus that breakaways are valuable scoring opportunities that are to be respected as vehicles with which to make a valuable offensive contribution to the team. As a result of this recognition, a sense of responsibility to make the most of the given opportunity influences many of the players' experiences on breakaways. Earl appears to have a unique perception of breakaways. Earl focuses on the contribution that he made to the team by getting in the position to be on a breakaway. Other players have tended to focus on the responsibility to capitalize on the breakaway. Either way, the players agree on the fact that breakaways are linked to a sense of personal contribution to the team.

The Issue of Feeling in Control

Perception of control. The players all spoke of the issue of feeling in control (or not) on breakaways. Five players reported feeling in control when they are on breakaways:

Oh ya for sure[I feel in control]. I mean, as a player I like to make the first move. I know some guys like to see what the goalie is going to do . . . I like to make the first move whether it is a head fake or a body fake just to see where the goalie is going to go, and by doing that it gives me control over the puck and control over what I am going to do. (Jerry)

I pretty much feel in control . . . you are not going to get a better chance than that and that is the kind of pressure you want and I feel the fate is in my hands. (Harry)

I kinda know how to make the goalie move where to make him move, where to open up spots, where to shoot, so I feel confident in that sense . . . Oh, yeah, you feel in control in that situation. (Albert)

Ya I think [I feel in control]. I think its up to you, you realize what is going on and and you have a pretty clear set in your mind what is going to happen. (Dexter)

Yeah, I do [feel in control]. You know if you feel you are going to score you have to feel like you are in control. (Gavin)

The feeling of being in control is mentioned in combination with the possession of a plan of action and an apparent perception that they have the skills necessary to meet the challenge of a breakaway by Albert, Dexter, and Jerry. This combination is characteristic flow (Csikszentmihalyi, 1975, 1990; Jackson, 1996; Jackson & Csikszentmihalyi, 1999). Based on this combination of characteristics, it could be inferred that Albert, Dexter, and Jerry experience flow on breakaways. Perhaps the presence of flow contributed to their attainment of peak performance, which may have contributed to their success in making it to the NHL. More research would be necessary to confirm or negate this hypothesis.

Perception of control in certain conditions. Three of the players reported feeling in control when certain conditions were in place or not feeling in control when certain conditions were in place:

Depends what time in the period it is, if it is fresh ice then ya, to me it depends how bad the ice is, sometimes I may not be able to do what I want to do to the goalie, but maybe just to shoot it off, get the puck off you may not be able to deek the goalie the puck may pop off, but on a clean sheet of ice and I am coming in on the goalie, no sweat at all. I feel like I have good enough hands. (Albert)

Depending on how much time I have, like if someone is pretty close to catching me or right on me then I don't feel as much in control but if I am in the clear then ya I feel like I am in control. (Charlie)

Albert and Charlie appear to perceive that they have a skills/challenge balance (Csikszentmihalyi, 1975, 1990; Jackson, 1996; Jackson & Csikszentmihalyi, 1999) only under certain conditions. They also reported that their sense of control on a breakaway is related to these conditions that appear to influence their perception of the skills/challenge balance on breakaways. The finding that sense of control is directly influenced by a perception that his skills are sufficient to meet the challenges inherent in breakaways is consistent with research on flow (Csikszentmihalyi, 1975, 1990; Jackson, 1996; Jackson & Csikszentmihalyi, 1999) that also finds a link between these two concepts.

Ah, when I score I do and when I am playing well I have everything in control, but when I am not I feel maybe out of control, I feel like you know, like maybe I lost an edge on my skate, you always seem to notice outside factors a lot more, you are not as concentrated. (Earl)

Earl appears to be making a connection between his sense of control and his ability to concentrate fully on the task of being on a breakaway. This is consistent with Csikszentmihalyi's (1975, 1990) and Jackson's (1996) findings that both total absorption in and concentration on the task and a sense of control are characteristics of the flow experience. Thus, it would be expected that they would be related.

Perception of not being in control. One of the players reported feeling that he is not in control when he is on breakaways:

Not really, I feel like the goalie has the advantage. That is what goes through my head. I don't feel confident that I am going to score when I am on a breakaway. I know I am going to get a good chance to but I am not confident that I will. (Ian)

Ian reported feeling as though he is not in control on breakaways, and went on later to report having low confidence on breakaways. Confidence was evident in the statements from the players who described feeling in control on breakaways. This may indicate a link between confidence levels and a sense of control. Based on what is being said by the players, it appears as though it is difficult to feel a sense of control on breakaways if confidence levels are low.

Factors That Influence The Experience

Confidence. A final area that the players addressed was the area of certain factors that might come into play to change what they feel on a breakaway. The first factor that many players addressed was the moderating effect of confidence on their experience. This is one area that the players spoke of extensively, reporting that their experience can completely change based on their level of confidence. As mentioned in the section about an apparent timing change, players noted that confidence helps them to slow things down when they are on a breakaway, while lack of confidence serves to make things feel faster when they are on a breakaway. They also mentioned other ways in which their levels of confidence influenced their experiences on breakaways:

I think firstly you are not scared of making a mistake when you are confident. If you are a confident player you do what you want to do you just rely on your instincts, you're not afraid of making mistakes, you feel that any decision you make is a good decision, where if you are not confident in yourself you are questioning every move you make out there. (Dexter)

... if you are confident and you are scoring I think things just happen naturally, and you whatever ability you have, a lot of times when things go well it comes out, and takes over the situation. (Fred)

If I am playing with confidence I couldn't really tell you, you know as far as I saw this guys stick there so I turned back. It just kinda happened. If I wasn't playing with confidence I'd be like oh jeez I

should have picked up my head, I should have looked, and I should have done this, and I should have, I saw that guy's stick there so I should have done this or I saw two defensive men back and I heard someone calling, but when it happens it just kinda free flowing, you're definitely in the zone . . . I am coming in and ah, I just read and react to what's happening. It's something I come in and see the goalie is on one side of the net or if I see he is giving me something I just gotta react with and it just kinda happens . . . The ones I missed I was much more aware. I am like, okay this guy is going to catch me, I have got to speed away, okay skate, skate, skate. You know where is the puck, feel the puck, okay now look up, get your head up, okay where is the goalie, now I am going to shoot, top blocker. And then I miss so . . . [when] I scored, it kinda feels like not aware of what is going on, things just happen, almost like a habit, like you have been there before. You know I do a lot of visualization, it feels like myself I have been there before and it is very comfortable feeling. (Earl)

These players reported that when they are playing with confidence, they rely on instincts, while when they are playing without confidence, they are second-guessing themselves and spending a lot of time thinking while they are on a breakaway. This finding coincides with past research on flow. Jackson (1995) found having confidence and a positive attitude was mentioned by 64% of the elite athletes in her study as helping the occurrence of flow. Csikszentmihalyi (1975, 1990) and Jackson (1996) also found that a characteristic of being in flow is a sense of automaticity and spontaneity. Thus, the fact that players in this study reported that playing with confidence tends to result in them relying on instincts appears to be consistent with flow literature.

The reports by players that low confidence tends to make them think about many more things, rather than simply relying on instincts is consistent with past research. For example, such overthinking would be consistent with descriptions of cognitive anxiety (Martens, Vealey, Burton, Bump & Smith, 1990). Since cognitive anxiety and confidence are thought to be "opposite poles on a worry continuum: that is, self-confidence is viewed as the absence of

cognitive anxiety" (Man, Stuchlikova, & Kindlmann, 1995), it would make sense that low confidence would result in the occurrence of negative thoughts and overthinking that are characteristic of cognitive anxiety.

Other players mentioned that confidence levels influenced different aspects of their game and thus their breakaway experiences:

Yeah, confidence affects your whole game. Breakaways are no different. If you're not feeling good and confident, it just isn't right. It's uncomfortable and scary. You just pray for it to end and you pray you don't embarrass yourself too bad. You don't even really think about scoring. The pressure is horrible if you're not confident . . . When you have confidence, it's like woo! Look at me! You get a bit nervous still, but you're thinking about scoring and you're in the moment. (Harry)

It depends what mind you are in, you know some games you feel really good, your hands feel good you are excited to play, your legs feel good, in those situations you feel relaxed, and you feel confident but there are games in an 82 game schedule, you feel a little sluggish and stuff like that, you don't feel as confident with the puck so, depends what frame on mind you are in that game. (Gavin)

I don't know, it is like when I get on a breakaway I will be lucky to score now, and back then [when I was confident], the goalie would be lucky if he saved them . . . If I scored early in the game on a breakaway and I got another one I would feel a lot more comfortable. I might have a lot more confidence. If I am not playing well, and I find myself on a breakaway then I feel a lot of pressure to score, because if I don't score then it still hasn't been a good game for me. (Ian)

Clearly, the role of confidence in influencing breakaway experiences cannot be overstated for these players. Confidence is reported to affect the players' thoughts, feelings, perceptions, awareness, and levels of muscular tension. These are all factors that are central to the breakaway experience. Thus, it appears that by controlling confidence levels, players can indirectly control many other aspects of the breakaway experience. This speaks strongly to the

need to build and nurture confidence in players by teaching them to think positively and use visualization and by highlighting their successes and creating drills that allow them to experience success in many game-like situations.

Sense of security in their position on the team. Players reported that their experience on a breakaway changes depending on how secure their position is on the team. They reported that when they feel that their position on the team is not secure, they feel more pressure on breakaways and tend to be more tense:

You are less afraid of making a mistake or miss or do whatever, I think if you are a guy that is going to get played you are not too worried about it because if you miss you are still going to be playing. (Dexter)

Maybe if you are not sure if you are going to be playing constantly and that, you hope you score. You put a little more pressure on yourself to really do well . . . I think anytime you are out on the ice you want to do something, you want to prove you belong out there and you don't want to disappoint anybody or yourself. (Charlie)

Everyone knows what I can do, even up here everyone knows what I can do, it is just time to become a leader on the team. Ya you feel a little more nervous, I still feel confident in myself no matter what, maybe a little more nervous. (Bob)

Anxiety levels and pressure are perceived to increase when the players feel that their position on the team is not secure. This finding supports Bandura's (1986) postulation that perceiving the world around one as supportive reduces the likelihood of experiencing high levels of anxiety and self-preoccupation. Bandura posits that self-preoccupation, in the form of worry about failure and the dangers of trying new things, is a central feature of anxiety. This finding may also have implications with regards to sending players down from the NHL teams to the farm teams. Perhaps the confidence of the player should be given even more weight by the coaching staff when determining whether to send a player down to the farm team.

Players in the present study reported a low occurrence of such self-preoccupation. This may be a reflection of their feelings of security in their position on the team. This notion is supported by Sarason, Sarason, and Pierce's (1990) conclusion that people high in social support report experiencing less cognitive interference than do these with lower levels of perceived support.

Another possible explanation for the added tension and nerves when the players felt that their position on the team was not secure comes from research by Maslow (1970). He concluded that humans have a hierarchy of needs, beginning with physiological needs at the bottom and then safety, love, esteem, and finally self-actualization. Maslow (1970) went on to postulate that before higher needs such as esteem and self-actualization can be satisfied, the lower needs such as safety must be satiated. Based on this, it would be logical that players who did not feel safe and secure in their position on the team would certainly not be expected to have healthy levels of self-esteem. This postulation appears to be supported by the findings of this study.

Although none of the players were rookies at the time of the study, they clearly recalled their experiences as rookies on breakaways. Based on Maslow's (1970) theory, it would be logical that rookies who do not feel safe in their position on the team would be unable to satiate their need for esteem. As a result, they would experience greater anxiety and lower confidence, as was indicated in this study. Only when they felt safe and secure could they successfully gain esteem and confidence.

It seems as though distracting thoughts enter the minds of players who feel that their position on the team is not secure. Instead of having purely strategy-dominated thoughts, players reported thinking about the possibility of being sent down if they don't do well or about needing to impress the coach by scoring:

You want to give a first impression when you are a rookie and your first year. I had a breakaway last year early in the year and I was putting pressure on myself because I hadn't got my first goal, so that was weighing heavily on that breakaway. I was thinking, I need to score, it is my first goal and here is the best chance to do it . . . I was more tense during that breakaway and a lot more nervous. I wasn't able to calm it down. (Harry)

I think if you are kind of a borderline player and you are getting all these chances, breakaways, and you are not scoring you feel a lot of pressure that you might get sent down, you know if I am not scoring but you can do other things other than scoring then if you feel secure on your spot on the team I think you have a lot more confidence. You are just not thinking as much when you get on a breakaway, I think the less you think when you are on a breakaway the more successful you are going to be. (Ian)

The desire to impress coaches and prove that they belong on the team is reported as being common to the experience of players who perceive that their position on the team is not secure. This desire to impress tends to manifest itself in the form of added anxiety, increased tension, and distracting thoughts. Since all of these factors are known to have negative effects on performance, it may be useful for coaches to work to facilitate a sense of security in players as early as possible in the season by making necessary cuts quickly rather than dragging them out. Also, designating specific responsibilities to each player may be useful in helping players to see that they play an important role, thus facilitating a sense of security.

Game score/time. Based on the importance of game score/time in previous research (Dunn & Nielsen, 1996), players were asked if they were aware of the time of the game and/or the score of the game when they were on breakaways. Two of the players reported not being aware of the time of the game and the score in the game while eight players reported being aware of the score or time of the game while they were on breakaways:

A lot of times you have to play for the score for instance we are up a couple of goal, the coach isn't going to want you to take chances and so you are in a different kind of mode. So you are aware of the scoring in that situation. . . I think you have to [be] aware, a little bit . . . are you taking a chance [to] turn the puck over and go the other way? That is a big part of the game at this level is especially in the world I play . . . if I am an expensive liability I am not going to play so am I taking a chance defensively. If I am not then I take it for what it is worth. (Earl)

For sure . . . You always sort of know the score. You're not really thinking about it, but it's there in your mind. I don't know how you could ever not know the score. I don't know, but I definitely know what the score is. (Harry)

Oh ya, there are so many things, you probably can't even sit down and write because there are so many whether it is the time of the game, whether it is a delayed penalty, or whether the goalie is pulled out of the net, there is so many little things that as a hockey player you understand but those not in hockey might not even recognize, so and when you are on the ice it happens so fast you have to slow it down and think about it and do the things you have learned. (Jerry)

While Jerry and Harry appear to be aware of the score and time of the game, they do not report that this awareness has any impact on their breakaway experience. Conversely, Earl appears to consider game score and time when he is deciding what degree of defensive risk to take in his attempt to score. This appears to be an effective use of the knowledge of the game score and time, and may be worth considering as a coach. Perhaps this will make coaches aware of the need to outline the degree of defensive risk that they think is appropriate and optimal in different game score and time situations.

Seven of the players listed the time of the game and the score in the game as two factors that influence their experience on breakaways. They reported that they feel more pressure late in the game than early in the game and they reported

that they felt more pressure when the score was close than when the score was not close:

... in the game maybe you are down, or maybe it is tied ... this is it. Like if you tied the game, or won the game for our team, you're, I could do it right now, and if it doesn't happen pay it off by backchecking, you know I have something to do, you know it will happen, just work hard ... Less pressure early in the game. ... It makes you more relaxed. When there is more pressure it makes you a little more nervous ... I think the percentages. The team is up or the team is down, a person is more relaxed on a breakaway. (Bob)

Increased tension was reported on breakaways that occurred late in the game and when the score was close. This is consistent with research by Dunn and Nielsen (1996) that found that the game score/time category accounted for 25% of the anxiety-inducing situations listed by university, college, and regional soccer and hockey players. This increased tension that was experienced by players when the game score was close and it was late in the game was perceived to cause the player to perform less effectively:

There would be more pressure late in the game just because it is kind of the last chance to do it and if it is in the start of the game well I feel like I still have the rest of the game to get on a breakaway or make other plays or do something else ... depending on what the score is in the game, if it is a close game I feel more pressure, but if it is a lopsided score then I, that is usually when I score on my breakaways, when it is not a tight game where it doesn't really matter if I score or not. (Ian)

Ya, I think maybe obviously late, if the game is close and it is tied, you probably think of the options that you should do but you think maybe the gravity of the situation a little more. You are thinking this may be the game winner, or this may tie the game for us ... You become a little more tense. You grip your stick a little more tighter. You are not as smooth or confident, You are not as relaxed. You are not as efficient as you normally would be. (Earl)

Ya depending if it is late in the game, and you are down by one, or the score is tied, you don't cash in on that opportunity, you feel a little more responsible so I think you would feel a little more

relaxed if it was early in the game, like first period, first ten minutes, or something like that . . . Ya I don't think you would have as much pressure on yourself and anytime there is less pressure you feel a little more relaxed so. (Gavin)

If it is late in the game and you are down a goal and you don't score, I think you would be a little more disappointed . . . I think as the game goes on there is a little more pressure to score if you are down . . . You know, maybe you mentally, you would go through the same thing. Your hands might be a little tighter, you might not make a move that you normally might make. You would go with something you feel really comfortable with. (Charlie)

Gavin reported an intensifying of his experience on breakaways late in close games. For Charlie, a link existed between game score/tie and strategic choice. Earl and Charlie's reports of the game score/time causing a sense of increased tension and decrease in performance is consistent with research on perceived importance of the outcome of an action and how that relates to anxiety (Lox, 1992; Marchant et al., 1997). These studies also found that levels of somatic anxiety [which is characterized by increased tension (Jones et al., 1990)] are positively correlated with perceived importance of the outcome. Players in the present study reported that the game score/time affects the perceived importance of the outcome of their breakaway.

Interestingly, this other player reported the time of the game as a factor that changed his experience, but he did not report that he felt added pressure or tension as a result of the time of the game. His experience reportedly changed due to the change in ice conditions that results as the game goes on:

. . . the time of the game, if you know the ice is chewed up and then it was in the start of the game or where there is only a minute left in the period and the ice is a lot softer you might want to shoot instead of deeking because . . . I have decided that actually before, not in the NHL but in College or Junior. It is something that if you know that you are not going to get as good of a deek as right as a shot because the ice is poor you are probably going to shoot. (Jerry)

Playoffs. The players reported that there was a much greater feeling of pressure on breakaways in the playoffs. They were emphatic in pointing out that playoffs is a different situation for all aspects of the game, and a breakaway is no different:

Playoffs, I think everything is just magnified. Every aspect of the game, so I think the excitement is just magnified, but I think otherwise you are thinking the same things. (Charlie)

If it is Stanley cup playoff game, obviously the excitement and the pressure is a little higher so there is a little more riding on it, where if it is the first game of the season or ten games into the season the pressure isn't there and you don't get a big rush of adrenaline. (Gavin)

Well, in playoffs you want to make sure that puck goes in, where in regular season you still want to make sure the puck goes in, but in a playoff it is a do or die situation. (Albert)

This finding may be linked to the finding that perceived importance of the outcome affects levels of anxiety (Lox, 1992; Marchant et al., 1997). It is clear that for these players, perceived importance of the outcome of their breakaway is increased in the play-offs. This would lead one to infer that increased anxiety may be experienced on breakaways in the play-offs. Gavin's report that pressure is higher on breakaways during the playoffs may support this contention, given the link between pressure and anxiety. Also, Albert's description of breakaways during playoffs as being "do or die" would suggest that increased anxiety would be experienced, given the perceived threat inherent in such a situation.

Location of the game. Another factor that many players mentioned as affecting their experience was whether they were playing at home or away. It appears that different players are affected differently in each situation. Whether it was better to have a breakaway at home or away was not agreed upon by the

players in this study. Earl, who felt that playing at home could potentially be an advantage said:

Sometimes at home if you are tired and you hear the crowd now all of a sudden you get that adrenaline rush and it will help you but on the other side of it is that sometimes you hear the crowd and you grip your stick a little too tight and I guess it could be a con, where on the road it kinda works the same way, you don't have the crowd to boost you when your on a breakaway, and you are tired but at the same time maybe a little more relaxed. (Earl)

This finding is supported by conclusions in previous studies finding that athletes perceive a home advantage (Bray and Widmeyer, 1999; Jurkovic, as cited in Courneya and Carron, 1992). It is also partially supported by findings from Zeller and Jurkovic, as cited in Courneya and Carron (1992) and by Irving and Goldstein (1990) that players are more likely to have peak performances in their home.

This same player, however, indicated that at times it is a disadvantage to be playing at home:

Sometimes at home that can help or hinder. You hear the crowd and they are anticipating you are going to get a chance to score. So now you are thinking, I am really getting a chance here you tense up a little bit and you grip your stick a little tighter, where if it was on the road if you get an opportunity they are not going to be cheering for you if you are on a breakaway so it is a little more relaxed, you are not as up tight or whatever . . . It kinda works both ways. (Earl)

Another player agreed with the contention that it was advantageous to play on the road:

It is probably a little better to be away, the pressure is off the away team they are not expected to, you don't have to put on a show so to speak, if you miss you miss, but at home there is probably a little more pressure because everyone is cheering for you and want you to score. (Gavin)

This reported preference to play on the road provides partial support for Wright, Voyer, Wright, and Roney's (1994) conclusion that home-ice is a disadvantage in crucial games. It also coincides with Baumeister and Steinhilber's (1984) finding that athletes who play in front of a supportive audience are less successful than visitors.

Penalty shot. A final factor that some of the players pointed out as causing the experience of a breakaway to change was being on a penalty shot. Players recalled experiences that they have had on penalty shots that they have taken at different times in their hockey careers. None of the players in this study had a penalty shot in the NHL at the time of the study. Although a penalty shot is technically a breakaway (as defined for the purposes of this study) since the player is in alone on the goalie, the players were very clear that the experience of being on a penalty shot is significantly different from being on a regular breakaway. The stoppage in play and the extra time to think are reported to cause the players to overthink and to get even more physiologically aroused than on a regular breakaway:

It is a breakaway but you are the only guy on the ice. I think that is more severe. I definitely think you would feel more tense and more nervous. Then you are really thinking about it. The game is stopped. You have everything, instead of just getting a pass and you are in. It is like everything is zeroed in on you . . . I think a lot more things come into it. I think you would even start to hear the crowd more, you would feel more tense than you normally would, even more than on a normal breakaway. (Dexter)

Penalty shots are way more nerve wracking. You have way too much time to freak out . . . You panic more and you think way too much. I think I don't get any practice at this, so it's new and more nervous. (Gavin)

A breakaway, like I said, is 90% instinct. You don't have a lot of time, it happens so quickly. Penalty shot, the whistle stops, you get the puck at centre ice, there is nobody trailing you, you have

time between the break, so it is a lot more nerve wrecking. You almost overthink to the point where you get in trouble. There are a few differences. A penalty shot is quite different than a breakaway. (Harry)

In a penalty shot you really have time to overthink and freak out. It's very unnatural. The game stops and everyone just stares at you. You think way too much about what to do instead of just going with the flow and trusting yourself. (Jerry)

Russell (2000) found that long stoppages in play resulted in a disruption of flow. This is consistent with the finding in this study that penalty shots are experienced differently from breakaways. The players in this study reported that the stoppage in play that occurs for a penalty shot causes them to experience increased tension and nervousness and to overthink. This is also consistent with Jackson, Kimiecik, Ford and Marsh's (1998) finding that anxiety caused the athletes' energy to be too erratic, resulting in a lack of flow experience.

Main Findings

Consistent with the goals of this study, a detailed description of what is experienced on breakaways was provided by the players and compiled in the results and discussion section. As was expected, all of the players reported experiencing a noticeable physiological change when they were on breakaways. However, there was little agreement as to whether the change they were experiencing was flow or anxiety. Significant findings from this study include : 1) the immense role of confidence in moderating affective changes, the perception of time speeding up/slowing down, cognitions, attention, and perception of control, 2) the effects that a lack of security in their position on the team have on anxiety, tension, cognitions, and self-preoccupation, 3) the degree to which players are influenced by how they think the coach evaluates their performance, 4) the players' desire to experience a slowing down of time, 5) the dominance of strategy-based thoughts, 6) the increased intensity and tension experienced in play-offs and late in games in which the score is close, and finally 6) penalty shots are experienced very differently from regular breakaways. These findings are closely related to the existing research on anxiety, flow, and confidence (See Table 7).

The fact that Earl reported that his past experiences tend to influence his thoughts on a breakaway is consistent with research on anxiety which finds that past performance is highly correlated to levels of anxiety experienced (Lane, Rodger, & Karageorghis, 1997; Lane, Terry, & Karageorghis, 1995a, 1995b). This finding also supports the finding by Martens and Gill (1977) that success and failure at a motor task predicted state anxiety levels.

Limitations of This Study

One limitation of this study is the fact that only six of the ten participants were available for follow-up interviews and member-checking. The reasons for

Table 7

Relationship of Sub-Themes To Existing Research

<u>Sub-Theme</u>	<u>Findings</u>	<u>Flow</u>	<u>Anxiety</u>	<u>Confidence</u>
<u>Physiological Activation</u>	<u>"adrenaline rush"</u>	~	~	
<u>Muscular Tension</u>	<u>"everything gets tight"</u>	~	~	
<u>Anxiety</u>	<u>"nerve-racking"</u>		~	~
<u>Excitement</u>	<u>"sense of euphoria"</u>	~		
<u>Relaxed Intensity</u>	<u>"in control but laid back"</u>	~		~
<u>Mixed Emotions</u>	<u>"nervous excitement"</u>	~	~	
<u>Perception Time Slows Down</u>	<u>"everything is in slow motion"</u>	~		
<u>Perception Time Speeds Up</u>	<u>"feels like you hit fast forward"</u>	~	~	
<u>Perception Time Stays At Regular Speed</u>	<u>"going the speed it's actually going"</u>			
<u>Tactical Focus</u>	<u>"see where the goalie is & decide to make my move"</u>	~	~	~
<u>Temporal Cognitive Focus</u>	<u>"you think about the present about what you're gonna do & the future of the outcome"</u>	~	~	
<u>Distracting Thoughts</u>	<u>"don't screw this up"</u>		~	~
<u>Positive Thoughts</u>	<u>"I am going to score"</u>	~		~
<u>Crowd</u>	<u>"you hear the crowd but it's not something you focus on"</u>	~		
<u>Feedback From Coaches & Teammates</u>	<u>"you're half listening for the bench"</u>	~		
<u>Player Positioning</u>	<u>"aware if there's pressure from behind you"</u>	~		
<u>Sense of Responsibility</u>	<u>"don't want to let the team down"</u>		~	
<u>Perception of Control</u>	<u>"fate is in my hands"</u>	~		~
<u>Perception of Control In Certain Conditions</u>	<u>"depending on how much time I have"</u>	~	~	
<u>Perception of Not Being In Control</u>	<u>"the goalie has the advantage"</u>		~	
<u>Confidence</u>	<u>"if you are confident, things happen naturally"</u>	~		~
<u>Sense of Security In Their Position On The Team</u>	<u>"you want to prove you belong out there"</u>	~	~	~
<u>Game Score/Time</u>	<u>"less pressure early"</u>		~	
<u>Playoffs</u>	<u>"more riding on it"</u>	~	~	
<u>Location of The Game</u>	<u>"at home can help or hinder"</u>	~	~	
<u>Penalty Shot</u>	<u>"everything is zeroed in on you"</u>		~	

Note: Shows which existing research areas relate to the subthemes of this study.

non-participation in the follow-up interview and member-checking processes varied from injury, to being ill, to being traded. Thus, information from the

remaining four players in the study remains incomplete. Thus, the possibility exists that misinterpretation occurred and that the results are affected by this limitation.

Another limitation is the potential lack of transferability of results due to the many uniquenesses of the population being studied (See Delimitations of This Study for a detailed discussion). As well, since this was a retrospective study, requiring participants to recall their experiences, the possibility exists that certain details were forgotten or altered with the passage of time.

Practical Implications For Sport Psychologists and Future Researchers

Consistent with the flow research (Csikszentmihalyi, 1975, 1990; Jackson, 1995; Jackson & Csikszentmihalyi, 1999) were the players' reports of a perception of control without actively trying to be in control, a perception of a disorientation of time, an awareness of the crowd in general without awareness of the specifics of the crowd, a tactical focus of cognitions, a sense of confidence, and a feeling that the skills necessary to succeed on a breakaway were possessed by the participant. Thus, seven of the nine dimensions of flow were supported and two were not. However, though the dimensions of intrinsically interesting and loss of self-consciousness were not specifically discussed by the participants, it seems likely that they may have experienced them.

Past research by Jackson (1992) concluded that experiencing flow was facilitated by a positive mental attitude. Perhaps players who reported experiencing excitement have a more positive mental attitude, and thus are more inclined to interpret their physiological arousal in a positive manner and choose the label "excitement" to describe their somatic state. For instance, Earl, Jerry, Ian and Gavin all reported experiencing similar rushes of adrenaline while on breakaways. However, Earl and Jerry went on to describe their experience as being exciting, while Ian and Gavin reported experiencing anxiety. It seems

plausible that Earl and Jerry merely chose a positive label for their physiological arousal because they generally tend to think positively. Perhaps encouraging players to form a habit of thinking positively would help to facilitate a positive interpretation of the adrenaline rush that is reportedly common on breakaways, which would help them to get into flow.

Consistent with the research on anxiety (Dunn, 1999; Dunn & Nielsen, 1993, 1996; Lewthwaite, 1990), some players in this study reported feeling anxious, describing the existence of both somatic and cognitive anxiety symptoms. Perhaps some players experienced anxiety on breakaways because they perceived a demand/resource imbalance (Lewthwaite, 1990), while other players experienced flow as a result of perceiving a balance between their skills and the task of being of a breakaway (Csikszentmihalyi, 1975, 1990; Jackson, 1996; Jackson & Csikszentmihalyi, 1999). It is clear that the link between perceived skills and challenges may be key to the breakaway experience. As such, focusing on strengths and practicing breakaways to improve skills appear to be important aspects for coaches and players to include in training. The mixed results (i.e., some players experiencing flow while others experienced anxiety) make it important for sport psychologists to ask questions to determine which category their client fits into, if any. If anxiety is part of the player's experience, perhaps training to increase perceived skills, perhaps via visualization, and decrease perceived challenges, possibly by watching videos to recognize weaknesses of different goalies, would be helpful.

The finding that confidence levels played a role in determining how breakaways were experienced by the players provides support for this explanation. Low confidence was reported to cause players to have negative, disruptive thoughts. As Russell (2000) reported, confidence gives athletes the ability to reduce negative thinking, thus facilitating flow.

The finding that confidence plays a significant role in determining how players experienced breakaways may also have important implications for coaches, parents and sport psychologists. More research investigating types of coaching styles that foster environments conducive to building confidence would be useful based on the reports that players' experiences were influenced by thoughts of what the coach would think about their performance. Perhaps coaches need to become more aware of how certain of their behaviors influence confidence levels of their players. Also, making coaches aware of just how important their evaluations are to players may help them to see the importance of frequent one-on-one meetings with players in which positive feedback is provided along with constructive criticism of their play. Players (whom I worked with outside of this study) have frequently expressed frustration with coaches who did not provide them with feedback. They felt as though they had no control over their amount of ice time when they were being played sparingly without being given a reason for the decrease in ice time. Players said that they often gave up on trying to play well, explaining that they felt like they had no target at which to aim their performance. This is one example of a time when coaches could increase communication to help their players stay confident and motivated.

Research regarding player characteristics and effects of being sent down to the farm team would be helpful in helping coaches decide what to do with regards to placement of marginal players and treatment of these players once they have been sent down to the farm team. Perhaps more energy and time should be invested in helping players regain and maintain their confidence. Regular positive feedback and constant communication with the coaches of the NHL team would help players to feel that they are still valued and not forgotten about because they were sent to the farm team. Also, perhaps it is better for marginal players to be sent to the farm team where they can feel secure, playing a key role

and experiencing success, bringing them up to the NHL only when they can be given a relatively secure position. As well, having coaches clearly outline each player's role on the team, recognizing their contributions (no matter how small) may be useful in building and maintaining the confidence levels of all players, especially marginal ones. Further research on these suggestions would provide further insight.

The strong indication that sense of security on a team reduces the feelings of pressure is another valuable finding from this study. Perhaps it may be valuable for rookies and otherwise insecure players to work on building their sense of security in order to reduce the feelings of pressure on a breakaway. As coaches and psychologists, this may be an area that is worth noting and worth being sensitive to when dealing with players. More research may be warranted to further examine coaching styles and team environments and their influence on the subjective feelings of security of the players.

The finding that the thoughts of the players on breakaways is dominated by strategies is not necessarily surprising. Perhaps mental programs should focus on eliminating negative thoughts for players when they are on breakaways and teaching them to focus on strategic thoughts instead. It seems logical to infer that players would likely benefit from a program that focuses heavily on strategy and on which strategies are best suited for which situations, so that when the players are on the breakaway, they are accessing the most efficient strategies for the given situation. The finding that one player mentioned experiencing a feeling of having been in the situation before when he was on a breakaway and that this feeling of familiarity was a good feeling might lend support to this idea. A study involving a visualization group and a control group that measures degree of comfort and success on breakaways would help to provide further information on this issue.

As well, the finding that players reported relying on instincts when things were going well for them and overthinking when they were struggling might indicate a need to create mental programs to train athletes to clear their minds on demand. More research is needed in this area.

A finding that could be valuable for applied sport psychologists is that the players reported wanting to be able to slow down the experience of being on a breakaway, and that they were more able to slow down the experience when they were confident. More research on the correlations between confidence, subjective speed of breakaways, anxiety, and scoring percentage on breakaways may be warranted.

The finding that penalty shots and breakaways are experienced differently is notable. Although penalty shots are a rare occurrence in the game of hockey, it may be worth examining the experience of having a penalty shot in order to develop mental programs to maximize player performance on penalty shots. Contrary to my initial assumption, being able to master the mental skills necessary to maximize breakaway performance may not translate to an ability to maximize performance on a penalty shot. As such, mental skills programs should include working specifically on reducing anxiety and increasing focus on penalty shots. It would be incorrect to assume that a player would transfer mental skills from breakaways to penalty shots, given the differences in their experiences on each.

An area that would be valuable to examine is the correlation between player's subjective experiences on breakaways and their objective success rates on breakaways. Before it would be possible to develop appropriate mental skills programs for young players, more research would be needed in this area. We would want to model young athletes after NHL players who are experiencing high rates of success on breakaways. Perhaps differences in perceptions of control,

speed of the situation, physiological changes, perceptions of time changing, muscular tension, contents of cognitions, confidence levels, sense of security in their position on the team, and sense of responsibility are directly correlated to success on breakaways. More research is needed in this area now that these differences in experiences are known.

Implications For Interventions

The information provided in this study can be used as a starting point from which sport psychologists can begin to screen clients and establish mental skills programs to optimize performance on breakaways. Based on the information provided by players in this study, a draft of a self-report inventory for understanding breakaway experiences of clients was developed (See Appendix B).

Once areas of concern are understood by the sport psychology consultant, many different mental skills can be combined to create a program that will allow the players to perform optimally on breakaways. A list of potential problems that may be experienced on breakaways and some suggestions for minimizing these issues is provided in Table 8. Visualization programs can be used for many different purposes. Having the player recall a time in their career when they felt invincible and in control and confident is useful for building confidence. Having the player recall the details of that game, who they were playing, what their body felt like, what they were thinking, and how they were moving across the ice, would be helpful. Having players replay a favorite goal of theirs over and over, feeling the excitement race through their body, and seeing their teammates congratulating them, and feeling confident is a good way to remind them that they can be successful, and what that success feels like. It is useful to have players take a few deep breaths, allowing the feelings of confidence, and energy, and excitement to intensify as they exhale is also a helpful strategy.

Table 8

Possible Interventions For Potential Challenges on Breakaways

<u>Potential Challenge</u>	<u>Possible Interventions</u>
Tension	Progressive Relaxation
Perception that Time Speeds Up	Progressive Relaxation Thought-Stopping Reframing
Problems Retrieving Strategy Info.	Visualization
Distracting/Negative Thoughts	Thought-Stopping Positive Thinking Reframing
Sense of Responsibility	Positive Thinking Thought-Stopping Reframing
Perception of Not Being In Control	Progressive Relaxation Visualization
Lack of Confidence	Positive Thinking Thought-Stopping Reframing Visualization
Insecurity in Position on the Team	List of Why They Were Selected Role Definition Positive Thinking Thought-Stopping Reframing

Note: This list contains some suggestions, however, other suggestions may be appropriate as well.

Another strategy that is effective in building confidence is to have players create a list of all of the reasons that they think they were chosen to play on their team. This helps players to realize that it was not a random choice that they got to play on their team, and that they contribute something valuable to the team. Often players lose sight of the fact that the coaches did select them for a reason. They tend to focus on why the coach might cut them from the team instead. This exercise helps to change that focus.

As a coach, having meetings with each player at the start of the season to explain to them what they are expected to contribute to the team would be very helpful. Role definition is an excellent way for players to feel secure in their position on the team, since they understand what it is that they are expected to contribute. It also facilitates a sense of intrinsic control over the situation, since it becomes clear to them that if they want ice time, they have to execute their role successfully. This eliminates the guessing game about what they should be doing in order to please the coaches. It has been found that coaches' efforts to promote role clarity and role acceptance may play a role in increasing team cohesion and player satisfaction (Rainey & Schweickert, 1991). As such, this is clearly an issue that is very important to players.

To facilitate a relaxed feeling on breakaways, a relaxation program is helpful. Using progressive relaxation to relax completely, then making a fist (as though they are gripping their stick tightly) and holding that fist until the feeling of relaxation and calmness begins to fade will help players to associate the feeling of gripping their stick tightly with a sense of relaxation. With enough practice, players should be able to make a fist and say "relax" when they first get on a breakaway, and this will help them to reach a state of greater relaxation. This skill takes a great degree of practice, and should be incorporated into a nightly mental skills routine and a daily pre-practice and pre-game routine.

To facilitate the process of scanning their minds for potential moves in different situations on a breakaway, visualization is very useful. By having players visualize every possible situation that could arise on a breakaway, and which move would work best in each situation, players are more prepared. When they visualize, for example, a breakaway when they are coming in on the right side and the goalie drops and gives them top corner glove side to shoot at and they take a hard wrist shot at the top corner and score, that response becomes

more automatic, and is likely to be their response choice when they get in the pressure situation of a breakaway during a game. By planning and visualizing the best responses in all possible situations, the players are making the process of scanning their minds for possible moves much easier and quicker. This is supported by the findings of respective studies with soccer players, skiers, and tennis players which found that mental practice of skills results in increased reaction speed and improved accuracy and technical quality of skills (Blair, Hall, & Leyshon, 1993; Grouios, Kouthouris, & Bagiatis, 1993; Li-Wei, Qi-Wei, Orlick, & Zitzelsberger, 1992). With visualization, breakaways will feel more comfortable and familiar. Every split second that a player can gain on a breakaway may increase their chance of scoring.

Since distracting thoughts are reportedly common on breakaways (and in many other game situations), learning to monitor their thoughts and keep them positive is important. Begin by having players keep note of their thoughts for a few days during practices. Then, work together to think of alternative thoughts that would be more positive and helpful in each situation. Teach players to use thought-stopping and reframing to minimize the impact of negative, distracting thoughts. By forming the habit of thinking positively and reframing any negative thoughts, players will eliminate a lot of their cognitive distraction on breakaways, freeing up mental energy and time to deal with strategy and awareness of important cues.

In line with the idea of positive thinking is the idea of perceiving the adrenaline rush that occurs on a breakaway in a positive manner. By encouraging players to accept and enjoy this rush, labeling it excitement and readiness rather than anxiety and nervousness may be helpful.

Conclusion

This was an exploratory study that has raised many questions for future investigation. Based on the information in this study, we know about several factors that play a key role in the experience of NHL players on breakaways. With this knowledge, perhaps sport psychologists will be better equipped to set up mental skills programs to assist players in experiencing breakaways in a way that is most conducive to a successful performance. As well, perhaps coaches will use the information in this study to become more aware of what an important role they can play in determining how a player experiences breakaways.

Hopefully this study will be the first in a long line of future studies that will answer the many unanswered questions regarding confidence, performance, anxiety, enjoyment, and the importance of feeling a sense of security, that exist at this time. At this point, we are equipped with a more complete description of what breakaways are like for this group of NHL forwards that can be used as a springboard for many different studies. Hopefully from this understanding will come more knowledge.

References

- Backstrom, C.H., & Hursh, G. (1963). *Survey research*. Evanston, IL: Northwestern University Press.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barone, T.E. (1990). Using the narrative text as an occasion for conspiracy. In E.W. Elliot & A.Peshkin (Eds.), *Qualitative inquiry in education* (pp.305-326). New York, NY: Teachers College.
- Baumeister, R.F., & Steinhilber, A. (1984). Paradoxical effects of supportive audiences on performance under pressure: The home field disadvantage in sports championships. *Journal of Personality and Social Psychology*, 47, 85-93.
- Blair, A., Hall, C., & Leyshon, C. (1993). Imagery effects on the performance of skilled and novice soccer players. *Journal of Sport Sciences*, 11, 95-101.
- Bray, S.R., & Widmeyer, W.N. (1999). Athletes' perceptions of the home advantage: An investigation of perceived causal factors. *Journal of Sport Behavior*, 23,(1), 1-10.
- Cannell, C.F., Fisher, G., & Marquis, K.H. (1968). The influence of interviewer and respondent psychological and behavioral variables on the reporting in household interviews. *Vital and Health Statistics*, 2, 26. Washington, DC: Government Printing Office.
- Converse, J.M., & Schuman, H. (1974). *Conversations at random: Survey research as interviewers see it*. New York: Wiley.
- Courneya, K.S., & Carron, A.V. (1992). The home advantage in sport competitions: A literature review. *Journal of Sport and Exercise Psychology*, 14, 13-27.
- Creswell, J.W. (1998). *Qualitative inquiry and research design*. Thousand Oaks, CA: Sage.

- Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety*. San Francisco: Jossey-Bass.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.
- Csikszentmihalyi, M., & Nakamura, J. (1989). The dynamics of intrinsic motivation: A study of adolescents. In C. Ames & R. Ames (Eds.), *Research on motivation in education, Vol.3: Goals and cognitions* (pp.45-71). New York, NY: Academic Press.
- Dale, G.A. (1996). Existential phenomenology: Emphasizing the experience of the athlete in sport psychology research. *The Sport Psychologist*, 10, 307-321.
- Dewar, A., & Horn, T. (1992). A critical analysis of knowledge construction in sport psychology. In T.Horn (Ed.), *Advances in sport psychology* (pp.13-22). Champaign, IL: Human Kinetics.
- Dunn, J.G.H. (1999). A theoretical framework for structuring the content of competitive worry in ice hockey. *Journal of Sport and Exercise Psychology*, 21, 259-279.
- Dunn, J.G.H., & Nielsen, A.B. (1993). A between-sport comparison of situational threat perceptions in ice hockey and soccer. *Journal of Sport and Exercise Psychology*, 15, 449-465.
- Dunn, J.G.H., & Nielsen, A.B. (1996). A classificatory system of anxiety inducing situations in four team sports. *Journal of Sport Behavior*, 19, 111-131.
- Erlandson, D.A. (1993). *Doing naturalistic inquiry: A guide to methods*. Newbury Park, CA: Sage.
- Fahlberg, L.L, Fahlberg, L.A., & Gates, W.K. (1992). Exercise and existence: Exercise behavior from an existential phenomenological perspective. *The Sport Psychologist*, 6, 172-191.
- Fisher, A.C., & Zwart, E.F. (1982). Psychological analysis of athletes' anxiety responses. *Journal of Sport Psychology*, 4, 139-158.

- Flick, U. (1998). *An introduction to qualitative research*. Thousand Oaks, CA: Sage.
- Gill, D.L. (1998). Gender differences in competitive orientation and sport participation. *International Journal of Sport Psychology*, 19, 145-159.
- Gould, D., Elkund, R.C., & Jackson, S.A. (1992). 1998 U.S. Olympic wrestling excellence: II. Thoughts and affect occurring during competition. *The Sport Psychologist*, 6, 383-402.
- Grouios, G., Kouthouris, H., & Bagiatis, K. (1993). The effects of physical practice, mental practice and video-demonstration practice on the learning of skiing skills. *International Journal of Physical Education*, 30 (3), 25-28.
- Hammermeister, J.J., & Burton, D. (1995). Anxiety and the Ironman: Investigating the antecedents and consequences of endurance athletes' state anxiety. *The Sport Psychologist*, 9, 29-40.
- Hammermeister, J.J., & Burton, D. (2001). Stress, appraisal, and coping revisited: Examining the antecedents of competitive state anxiety with endurance athletes. *The Sport Psychologist*, 15, 66-90.
- Hanton, S., & Jones, G. (1999). The acquisition and development of cognitive skills and strategies: I. Making the butterflies fly in formation. *The Sport Psychologist*, 13, 1-21.
- Hardy, L., Jones, G., & Gould, D. (1997). *Understanding psychological preparation for sport: Theory and practice of elite performers*. New York, NY: John Wiley & Sons.
- Holstein, J.A., & Gubrium, J.A. (1995). *The active interview*. Thousand Oaks, CA: Sage Publications Inc..
- Irving, P.G., & Goldstein, S.R. (1990). Effect of home-field advantage on peak performance of baseball pitchers. *Journal of Sport Behavior*, 13(1), 23-27.
- Jackson, S.A. (1992). Athletes in flow: A qualitative investigation of flow states in elite figure skaters. *Journal of Applied Sport Psychology*, 4, 161-180.

- Jackson, S.A. (1995). Factors influencing the occurrence of flow state in elite athletes. *Journal of Applied Sport Psychology*, 7, 138-166.
- Jackson, S.A. (1996). Toward a conceptual understanding of the flow experience in elite athletes. *Research Quarterly for Exercise and Sport*, 67(1), 76-90.
- Jackson, S.A., & Csikszentmihalyi, M. (1999). *Flow in sports: The keys to optimal experiences and performances*. Champaign IL: Human Kinetics.
- Jackson, S.A., Kimiecik, J.C., Ford, S.K., & Marsh, H.W. (1998). Psychological correlates of flow in sport. *Journal of Sport and Exercise Psychology*, 20, 358-378.
- Jackson, S.A., & Roberts, G.C. (1992). Positive performance states of athletes: Toward a conceptual understanding of peak performance. *The Sport Psychologist*, 6, 156-171.
- Jones, G., Hanton, S., & Swain, A.B.J. (1994). Intensity and interpretations of anxiety symptoms in elite and non-elite sports performers. *Personality and Individual Differences*, 17, 657-663.
- Jones, G., & Swain, A.B.J. (1992). Intensity and direction dimensions of competitive state anxiety and relationships with competitiveness. *Perceptual and Motor Skills*, 74, 467-472.
- Jones, G., & Swain, A.B.J. (1995). Predispositions to experience debilitating and facilitative anxiety in elite and non-elite performers. *The Sport Psychologist*, 9, 201-211.
- Jones, G., Swain, A.B.J., & Cale, A. (1990). Antecedents of multidimensional competitive state anxiety and self-confidence in elite intercollegiate middle-distance runners. *The Sport Psychologist*, 4, 107-118.
- Jones, G., Swain, A.B.J., & Cale, A. (1991). Gender differences in precompetition temporal patterning and antecedents of anxiety and self-confidence. *Journal of Sport and Exercise Psychology*, 13, 1-15.
- Jones, G., Swain, A.B.J., & Hardy, L. (1993). Intensity and direction of dimensions of competitive state anxiety and relationships with performance. *Journal of Sports Sciences*, 11, 533-542.

- Kvale, S. (1996). *InterViews: An introduction to qualitative interviewing*. Thousand Oaks, CA: Sage Publications Inc..
- Lane, A.M., Rodger, J.S.E., & Karageorghis, C.I. (1997). Antecedents of state anxiety in rugby. *Perceptual and Motor Skills*, 84, 427-433.
- Lane, A.M., Terry, P.C., & Karageorghis, C.I. (1995a). Path analysis examining relationships among antecedents of anxiety, multidimensional state anxiety, and triathlon performance. *Perceptual and Motor Skills*, 81, 1255-1266.
- Lane, A.M., Terry, P.C., & Karageorghis, C.I. (1995b). Antecedents of multidimensional competitive state anxiety and self-confidence in duathletes. *Perceptual and Motor Skills*, 80, 911-919.
- Lazarus, R. (1991). *Emotion and adaptation*. New York, NY: Oxford University Press.
- Lewthwaite, R. (1990). Threat perception in competitive trait anxiety: The endangerment of important goals. *Journal of Sport and Exercise Psychology*, 12, 280-300.
- Li-Wei, Z., Qi-Wei, M., Orlick, T., & Zitzelsberger, I. (1992). The effect of mental imagery training on performance enhancement with 7-10-year-old children. *The Sport Psychologist*, 6, 230-241.
- Lincoln, Y. & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Lox, C.L. (1992). Perceived threat as a cognitive component of state anxiety and confidence. *Perceptual and Motor Skills*, 75, 1092-1094.
- Mahoney, M.J., & Avenier, M. (1977). Psychology of the elite athlete: An exploratory study. *Cognitive Therapy and Research*, 1, 135-141.
- Mahoney, M.J., Gabriel, T.J., & Perkins, T.S. (1987). Psychological skills and exceptional athletic performance. *The Sport Psychologist*, 1, 181-199.
- Mallett, C.J., & Hanrahan, S.J. (1997). Race modeling: An effective cognitive strategy for the 100m sprint. *The Sport Psychologist*, 11, 72-85.

- Man, F., Stuchlikova, I., & Kindlemann, P. (1995). Trait-state anxiety, worry, emotionality, and self-confidence in top-level soccer players. *The Sport Psychologist*, 9, 212-224.
- Marchant, D.B., Morris, T., & Andersen, M.B. (1997). Perceived importance of outcome as a contributing factor in competitive state anxiety. *Journal of Sport Behavior*, 21,(1), 71-91.
- Marshall, C., & Rossman, G.B. (1999). *Designing qualitative research*. Thousand Oaks, CA: Sage Publications Inc..
- Martens, R. (1977). *Sport competition anxiety test*. Champaign, IL: Human Kinetics Publishers.
- Martens, R. (1982). *Sport competition anxiety test*. Champaign, IL: Human Kinetics Publishers.
- Martens, R., & Gill, D.L. (1977). State anxiety among successful and unsuccessful competitors who differ in competitive trait anxiety. *The Research Quarterly*, 47, (4), 698-708.
- Martens, R., Vealey, R.S., & Burton, D. (1990). *Competitive anxiety in sport*. Champaign, IL: Human Kinetics.
- Martens, R., Vealey, R.S., Burton, D., Bump, L.A., & Smith, D.E. (1990). Development and validation of the Competitive State Anxiety Inventory 2. In Martens, R., Vealey, R.S., & Burton, D. (Eds), *Competitive anxiety in sport*. Champaign, IL: Human Kinetics. Pp. 117-190.
- Maslow, A.H. (1970). *Motivation and personality*. New York, NY: Harper & Row Publishers.
- Mischel, W. (1979). On the interface of cognition and personality. *American Psychologist*, 34, 740-754.
- Moran, A.P. (1996). *The psychology of concentration in sport performers: A cognitive analysis*. East Sussex, UK: Psychology Press.
- Paterson, R.J., & Neufeld, R.W.J. (1987). Clear danger: Situational determinants of the appraisal of threat. *Psychological Bulletin*, 101, 404-416.

- Rainey, D.W., & Schweickert, G.J. (1991). Satisfaction with playing time and team cohesion. In W.K. Simpson, A. LeUnes, & J.S. Picou, (Eds.). *Applied research in coaching and athletics annual 1991*. (pp.195-205). Boston: American Press.
- Rubin, H.J., & Rubin, I. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage Publications Inc..
- Rushall, B.S. (1984). The content of competition thinking. In W.F. Straub & J.M Williams (Eds.), *Cognitive sport psychology* (pp.51-62). Lansing, NY: Sport Science Associates.
- Russell, W.D. (2000). An examination of flow state occurrence in college athletes. *Journal of Sport Behavior*, 24(1), 83-107.
- Salame, R.F. (1984). Test anxiety: Its determinants, manifestations and consequences. In H.M. Van Der Ploeg, R. Schwarzer, & C.D. Spielberger (Eds.), *Advances in test anxiety research* (Vol. 3, pp.83-91). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Sarason, I.G., Sarason, B.R., & Pierce, G.R. (1990). Social support, personality, and performance. *Journal of Applied Sport Psychology*, 2, 117-127.
- Scanlan, T.K., Stein, G.L., & Ravizza, K. (1989). An in-depth study of former elite figure skaters: II. Sources of enjoyment. *Journal of Sport and Exercise Psychology*, 11, 65-83.
- Sparkes, A.C. (1998). Validity in qualitative inquiry and the problem of criteria: Implications for sport psychology. *The Sport Psychologist*, 12, 363-386.
- Spielberger, C.D. (1966). *Anxiety and behavior*. New York, NY: Academic Press.
- Spielberger, C.D. (1971). Trait-state anxiety and motor behavior. *Journal of Motor Behavior*, 3,(3), 265-279.
- Theodorakis, Y. Weinberg, R., Natsis, P., Douma, I, & Kazakas, P. (2000). The effects of motivational versus instructional self-talk on improving motor performance. *The Sport Psychologist*, 14, 253-272.

- Thorpe, R., Bunker, D., & Almond, L. (1986). *Rethinking games teaching*. Northants, England: Nene Litho.
- Van Manen, M. (1990). *Researching the lived experience*. London, Ontario: State University of New York Press.
- Vealey, R.S. (1986). Conceptualization of sport confidence and competitive orientation: Preliminary investigation and instrument development, *Journal of Sport Psychology*, 8, 221-246.
- Weiten, W. (1998). *Psychology: Themes and variations*. Pacific Grove, CA: Brooks/Cole.
- Wright, E.F., Voyer, D., Wright, R. & Roney, C. (1994). Supporting audiences and performance under pressure: The home-ice disadvantage in hockey championships. *Journal of Sport Behavior*, 18(1), 21-26.

Appendix A

Potential Interview Questions

- Recall the times that you have been on a breakaway. Can you describe the experience to me?
- *Do you feel in control of the situation?
- *Is there another option available to you? i.e. Can you pass the puck back? Are you thinking about these options?
- Would you tell me about what your body felt like when you got the puck in over the blue line and were in alone with the goalie?
- *Start at your head and work your way down to your feet, describing any sensations you had.
- *How did you like the feeling?
- *How would you label the feeling - what word would you use to describe it?
- *Do you feel this way in any other situations?
- *Do you feel any sense of responsibility? To whom?
- *Why do you think you felt this way?
- *Would you feel differently if it was early/late in the game? Playoffs? Home/away? If you were winning/losing?
- Take me through your thoughts from the time you got the puck. I am going to be quiet for 2 minutes while you talk me through your thoughts.
- *How did you feel after this thought came into your head?
- *Do you have any idea why you might have thought this at that time?
- *Are you aware of any ways to get out of this breakaway situation i.e. stopping and waiting for someone to pass to?
- *Were your thoughts focused on the past, present, or future?
- *Did it seem like time sped up, slowed down, or stayed the same?
- What were you aware of from the time that you got the puck to the time that the play ended? Spend 2 minutes telling me about the things you were aware of.
- *What did you see? How did that make you feel?
- *What did you hear?

- *Were you aware of any other senses?
- *Were you aware of the score/time?
- *Were you conscious of who the goalie was? Did that affect your thoughts, feelings, or focus in any way?
- *Were you aware of where your teammates were? How did that make you feel?
- *Were you aware of where your opponents were?
- Is this the way that you always experience one-on-one situations?
- *Have you ever had a different experience in a one-on-one situation?
- *Do you know why it might have been different for you that time?
- *Did you have the same experience in one-on-ones in minor hockey? Junior?
- Would your experience change based on any game situations?
- *What factors would make you experience something different?
- *Do you have a scoring bonus in your contract? Would this ever influence your experience when you have a breakaway?
- *Does your experience change depending on how secure your position is on the team?

-Main Questions

- *Probing Questions (Rubin & Rubin, 1995)

Appendix B

Breakaway Experience Introductory Checklist

Think of what it is like for you when you are on a breakaway. Respond to the following questions based on what it is like for you on a breakaway.

0= Not Like Me At All 1= Not Really Like Me 2=Somewhat Like Me 3=Very Much Like Me

- | | | | | |
|---|---|---|---|---|
| 1. I feel an adrenaline rush. | 0 | 1 | 2 | 3 |
| 2. My body feels tense/tight. | 0 | 1 | 2 | 3 |
| 3. I feel like I'm getting caught. | 0 | 1 | 2 | 3 |
| 4. I think "everyone is watching me". | 0 | 1 | 2 | 3 |
| 5. I feel nervous. | 0 | 1 | 2 | 3 |
| 6. I feel excited. | 0 | 1 | 2 | 3 |
| 7. It is the normal feeling I have throughout the game. | 0 | 1 | 2 | 3 |
| 8. I feel in control and strong, but relaxed so I'm not overdoing it. | 0 | 1 | 2 | 3 |
| 9. It feels like time slows down. | 0 | 1 | 2 | 3 |
| 10. It feels like time speeds up. | 0 | 1 | 2 | 3 |
| 11. I feel like I am a step behind. | 0 | 1 | 2 | 3 |
| 12. I look up to see the goalie's position as I choose my move. | 0 | 1 | 2 | 3 |
| 13. I react on instinct. | 0 | 1 | 2 | 3 |
| 14. I always use the same move(s). | 0 | 1 | 2 | 3 |
| 15. I look for a hole to shoot at. | 0 | 1 | 2 | 3 |
| 16. I decide which move to use early. | 0 | 1 | 2 | 3 |
| 17. I think about the goalie's strengths and weaknesses. | 0 | 1 | 2 | 3 |
| 18. I think about the goalie's tendencies. | 0 | 1 | 2 | 3 |
| 19. I am thinking about past breakaways I missed on. | 0 | 1 | 2 | 3 |
| 20. I am thinking about past breakaways I scored on. | 0 | 1 | 2 | 3 |
| 21. My thoughts are in the present. | 0 | 1 | 2 | 3 |
| 22. My thoughts are in the past. | 0 | 1 | 2 | 3 |
| 23. My thoughts are in the future. | 0 | 1 | 2 | 3 |
| 24. I have negative/distracting thoughts. | 0 | 1 | 2 | 3 |
| 25. I am afraid I'll make a mistake. | 0 | 1 | 2 | 3 |
| 26. I question every move I make. | 0 | 1 | 2 | 3 |
| 27. I think "If I mess up, I'm not going to play." | 0 | 1 | 2 | 3 |
| 28. I think "Don't screw up." | 0 | 1 | 2 | 3 |
| 29. I think "I am going to score." | 0 | 1 | 2 | 3 |
| 30. I hear the rise of the crowd. | 0 | 1 | 2 | 3 |
| 31. I hear my coaches and teammates yelling from the bench. | 0 | 1 | 2 | 3 |
| 32. I am aware of how close the defender is. | 0 | 1 | 2 | 3 |
| 33. I get tunnel vision and focus only on the goalie. | 0 | 1 | 2 | 3 |
| 34. I feel a sense of responsibility to the team. | 0 | 1 | 2 | 3 |
| 35. I feel in control on a breakaway. | 0 | 1 | 2 | 3 |
| 36. I feel like the goalie has the advantage. | 0 | 1 | 2 | 3 |
| 37. I feel free flowing. | 0 | 1 | 2 | 3 |
| 38. It feels comfortable - like I've been there before. | 0 | 1 | 2 | 3 |
| 39. I can't wait for the breakaway to be over. | 0 | 1 | 2 | 3 |
| 40. I feel pressure to score. | 0 | 1 | 2 | 3 |
| 41. I want to prove that I belong out there. | 0 | 1 | 2 | 3 |
| 42. I don't want to disappoint anyone. | 0 | 1 | 2 | 3 |
| 43. I think "If I don't score, I'm going to get sent down." | 0 | 1 | 2 | 3 |
| 44. I am aware of the game score/time. | 0 | 1 | 2 | 3 |
| 45. I feel more tense if it is late in the game. | 0 | 1 | 2 | 3 |