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Focus and Refocusing Techniques used by Elite Marathon Runners

by

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Thesis submitted to the Faculty of Graduate and Postdoctoral Studies

in partial fulfillment of the requirements for the degree of

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### Abstract

Although existing literature shows that the ability to focus is among the most important mental skills necessary for optimal performance (Krane & Williams, 2006; Orlick, 2008; Orlick & Partington, 1988), little is known about the focusing techniques that elite marathon runners apply to perform at an optimal level. In-depth, semi-structured interviews conducted with 10 elite international marathon runners examined what elite marathon runners focus on when they perform their best, and the techniques they use to refocus. Essential elements of focus were being positive, in the moment, having body awareness, and a progressively increasing intensity of focus. Elite marathon runners refocused through distractions by accepting control and lack of control, turning negatives into positives, and replacing the distraction with something else. This knowledge can potentially be applied to other athletes, thus helping them enhance their focus and their subsequent performances.

## CHAPTER 1

## Introduction

Frank Shorter, an American who won the 1972 Olympic marathon, is often credited with stimulating the running boom (Lynch & Scott, 1999). Since this race, distance running has gained popularity among people of all abilities and ages, as demonstrated by the growing number of road races, running clubs, and research on running. However, despite the increasing popularity of marathon running, little research has studied the focus of elite marathon runners.

The marathon has a long and rich history, dating back to 490 B.C.E. when the Greek soldier, Pheidippides, ran from a battlefield near Marathon, Greece, to Athens with news of the Greek victory over the Persian invaders. Upon completion of the run, he collapsed and died (Galloway, 2000). In 1896, Greece held the first modern Olympic Games, and commemorated Pheidippides' famous run with the first official marathon, a distance of 40km, or 24.85 miles. Only nine of 17 runners completed the race, but the event spurred the birth of the marathon (Martin & Gynn, 2000). At the 1908 Olympic Games in London, the current marathon distance was established. Organizers wanted the marathon route to stretch from Windsor Castle to White Stadium, a distance of 26 miles. However, in order for the finish line to be in front of the royal box in the stadium, an extra 385 yards was added, resulting in the 26.2 mile, or 42.2 kilometre marathon, the distance that is still run today (Galloway). It wasn't until the 1984 Olympic Games in Los Angeles that the women's marathon was added (Lovett, 1997). Currently, the world record for the men's marathon is 2 hours, 3 minutes and 59 seconds, ran by Haile Gebrselassie of Ethiopia, in September of 2008. Paula Radcliffe, from Great Britain, who ran the distance in a time of 2 hours, 15 minutes and 25 seconds at the 2003 London Marathon holds the women's world record (Marathon Guide, 2009).

Literature has shown that predictions of athletic endurance performance based purely on physiological measures have been unsuccessful, which demonstrates the importance of psychological skills in the achievement of successful endurance performance (O'Conner, 1992). Research on running has continued to grow since the running boom began in the 1970s, moving from the early research examining personality characteristics of runners (Morgan & Pollock, 1977) to the detailed mental skills that can be applied to enhance endurance performance (Thelwell & Greenlees, 2003), to examinations of the link between focus and performance (Grand-Maison, 2005; Heffner, 2006; Kabush & Orlick, 2001; Krane & Williams, 2006; Orlick & Partington, 1988). While these studies provide insight into what elite athletes focus on while competing, more research is needed that looks specifically at how these runners are achieving this focus, if it is consistent, and how they refocus if the connection is lost.

Focus is thought to be one of the most, if not the most important skill associated with high level performance (Abernethy, 2001; Cox, 2007; Kabush & Orlick, 2001; Krane & Williams, 2006; Orlick, 2008; Ravizza, 1977; Wilson et al., 2006). Research has examined the differences in focus strategies between elite and non-elite runners (Masters & Lambert, 1989; Morgan & Pollock, 1977) as well as elite marathon runners and other endurance athletes (Grand-Maison, 2005; Kress & Statler, 2007; Silva & Applebaum, 1989; Tammen, 1996). Despite an increased understanding of the focus strategies that are used, research has yet to examine elite marathon runners in an attempt to understand *what* specifically these individuals are focusing on during their best performances and *how* they refocus.

The purpose of this study was to examine the focus that elite marathon runners use during their best and worst competitions, what happens if and when their best focus is lost, and techniques used to refocus. Specifically, this research attempted to answer the following research

questions: (a) what are elite marathon runners focusing on when they are performing at their optimal level? (b) is focus lost and why? and (c) how do elite marathon runners regain their focus if/when it is lost?

A review of literature is presented, which includes association and dissociation research in running and endurance sport, the importance of focus, the relationship between focus and mental skills, focus characteristics, and distractions and coping mechanisms. Following this, the research questions and methodology are described. The results are presented, and the thesis concludes with a general discussion chapter.

## CHAPTER TWO

### Review of Literature

The review of literature explores the existing research that examines runners and endurance athletes, association and dissociation, and focus and the use of mental skills to enhance performance. It begins by examining the characteristics of runners and the use of association and dissociation, and then explores focus, and how mental skills such as self-talk and imagery can assist in achieving focus. Characteristics of focus are expanded on, and distractions and coping mechanisms are examined in relation to focus. The purpose of this review of literature is to provide an overview of the existing knowledge of the cognitive strategies, mental skills, and techniques that runners use to enhance their performance as well as to look specifically at how focus is used for optimal performance.

#### *Association and Dissociation*

Morgan and Pollock's (1977) initial study of runners' psychological characteristics was ground-breaking in that it introduced the idea of associative and dissociative strategies, which have since largely dominated research in this area. Associative strategies are those in which the runner pays close attention to the signals he or she is receiving from his or her body, such as respiration, muscle sensations, and body temperature. Dissociative strategies are used when sensory cues are ignored, in an attempt to block out potential pain signals by focusing on other things (Schomer, 1986). Morgan and Pollock found that elite runners associate with their bodies, whereas non-elite runners dissociate in order to avoid thinking about pain.

Runners tend to dissociate more often in training than in races (Heffner, 2006; Masters & Lambert, 1989; Morgan & Pollock, 1977). Additionally, Masters and Lambert argued that racing tends to be more intense than training, and as a result, runners are in more pain during

competition. Based on the original theory that dissociation is used to deal with pain (Morgan & Pollock), runners should therefore be dissociating more often in races, but Masters and Ogles (1989a) suggested that this is not the case.

Masters and Lambert (1989) suggested that the cognitive style used by marathon runners is related to the athlete's reasons for running the marathon. It was found that more competitive motives resulted in the use of association more often. Those athletes who are more competitive (as opposed to recreational) may be monitoring their pace and form in order to contribute to a successful performance. Further research supported this finding (Masters & Ogles, 1998b), demonstrating that more competitive runners tend to associate more often in training, as compared to recreational runners (Masters, Ogles, & Jolton, 1993).

Several studies have looked at the differences in focus and attentional strategies between elite and non-elite athletes, but there is a lack of research that looks specifically at what these athletes are focusing on during their competition. While marathon runners have also been researched extensively, research has yet to examine the focus that is used by these elite athletes.

A quantitative study by Silva and Applebaum (1989) looked at the associative and dissociative techniques used by runners in the US Olympic marathon trials. Participants completed 12 multiple-choice questions that investigated the cognitions of the runners at various points in the race. Results demonstrated that the top performers used a mixture of associative and dissociative strategies throughout the race, while those who placed lower in the results used mainly dissociative techniques. The participants who used a mixture of associative and dissociative techniques adopted each strategy according to the demands of the race. It was found that both associative and dissociative strategies were used in the first five to eight miles of the race. However, the "real race" did not start until around 18 miles, at which point, the participants

began to fatigue. Dissociation was used as a method of dealing with the pain of running, and the authors argued that using an associative technique at that point in the race would be counterproductive to performance.

A quantitative study by Tammen (1996) looked at running pace and the use of associative and dissociative coping strategies in elite runners, specializing in distances from the 800m to the marathon. Questionnaires were used to measure thoughts and feelings after the participants had run at individualized, predetermined paces on a track. Results showed that as running speed increased, the athletes used more associative coping strategies, which helped them to better monitor their bodies and running intensity. The study also showed that the participants used more associative strategies when they were running at paces that were closer to their racing and training intensities, suggesting a relationship between pacing or effort and attentional focus.

#### *Fatigue and Perceived Exertion*

Endurance athletes have indicated that much of their success comes from the ability to tolerate high levels of athletic pain, and employ skills such as relaxation and self-instruction to deal with pain (Whitmarsh & Alderman, 1993). Schomer (1986) found that experienced runners had more specific techniques to deal with pain, and used cues such as “calf muscles relax” as opposed to simply “relax,” demonstrating greater power and control over their performance. This study also demonstrated that marathon runners who had more associative thoughts during their race also had a higher rating of perceived exertion, suggesting that association may be linked to increased perceptions of effort.

A study by Pennebaker and Lightner (1980) examined the running times and fatigue levels of athletes completing a lap course, which was assumed to prompt association, and a cross country course, representing an external focus condition. The researchers argued that the cross

country course would present a wider range of stimuli, which would create an external focus. Although fatigue levels were consistent on both courses, running times were faster on the cross country course. The results indicated that although pace increased on the cross country course, perceptions of fatigue remained the same. The authors concluded that focusing on external stimuli limited associative focus, resulting in less perceived fatigue and faster times.

In a study involving a 15 minute ergometer cycling task, Johnson and Siegel (1992) instructed participants to either associate or dissociate while exercising. A control group was also used, who were given no instructions for association or dissociation. In the associative condition, participants were asked to attend to internal physiological signals such as breathing and muscular tension. Dissociation was broken down into internal and external sub-groups: participants internally dissociating were asked to recall all of their teacher's names from kindergarten through to college, while those in the externally dissociating condition carried on a conversation with a researcher. Despite a lack of statistically significant differences in heart rate among the control and experimental groups following the cycling test, differences in perceived exertion emerged. The association group showed higher ratings of perceived exertion than the internal dissociation group, demonstrating that focusing on body sensations during exercise increases perceptions of fatigue as compared to a dissociative focus. Additional studies (Fillingim & Fine, 1986; Wrisberg Franks, Birdwell, & Highs, 1988) have supported these results, suggesting that dissociation or an external focus can result in less perceived fatigue than association. However, Weinberg, Smith, Jackson, and Gould (1984) failed to find a relationship between perceptions of fatigue and association.

Research by Werner (2003) examined the attentional focus strategies used by triathletes through the administration of questionnaires after a race. Results suggested that athletes who

placed in the top third of the race used mainly associative techniques, monitoring their pace and breathing during all three phases of the triathlon (swim, bike, and run). More experienced participants were more sensitive to the cues that they were receiving from their bodies and could attend to those signals during competition. Inexperienced athletes tended to dissociate more, suggesting that they had not developed the ability to monitor and respond to the cues from their bodies.

A study by Beaudoin, Crews, and Morgan (1998) looked at the relationship between feeling states, thoughts, and perceived exertion during a 30 minute run at 90% maximal oxygen uptake ( $VO_{2max}$ ) in well-trained male runners. Feeling states and perceived exertion were reported by the participants at 9, 19, and 30 minutes (or immediately before stopping). Only four of eleven participants finished, and results demonstrated that ratings of perceived exertion and feeling states differed between finishers and non-finishers at 19 minutes. Non-finishers had higher ratings of perceived exertion and more negative feeling states. Additionally, finishers reported an internal focus, using association to monitor their bodies, while non-finishers dissociated, focusing on external aspects and thoughts unrelated to the run. Although all of the participants were physically capable of finishing the run, the authors suggested that those who did finish had psychological strategies (such as positive feeling states and association) to help complete the run.

Research suggests that focus is one strategy that is used in order to deal with the pain and fatigue experienced during a cycling endurance event (Kress & Statler, 2007). During critical moments of competition, the participants focused on aspects of performance that would allow them to reach the finish line in the most efficient way possible. In order to respond effectively to each unique situation within the race, focus shifted from one stimulus to another in order to

attend to task-relevant cues instead of the pain that was being experienced. If pain was not accepted or viewed as “good,” perceptions of pain would intensify.

Although fatigue and perceptions of exertion have been examined, along with the corresponding use of association and dissociation, research is still lacking in this area. What is needed now is research that looks specifically at what athletes are focusing on to deal with fatigue and pain when they experience it in competition, and the refocusing strategies and techniques they use to deal effectively with fatigue and have a successful performance.

### *Cognitive Strategies*

Cognitive strategies are mental strategies and skills, such as mental planning, arousal regulation, concentration and focus, positive imagery, and coping responses that are used during athletic performance (Weinberg & Gould, 2003). Research by Stevinson and Biddle (1998) with sub-elite marathon runners demonstrated that inward monitoring was the technique most commonly used throughout a race, while outward monitoring and outward distraction were used at relatively similar levels. Inward distraction was higher for those who “hit the wall,” a phenomenon in distance running when an athlete exhausts his or her energy supplies (Stevinson & Biddle). A two-dimensional classification system for cognitive strategies was then proposed, which included relevancy of thoughts (task-relevant and task-irrelevant) and direction of thoughts (internal or external) (Stevinson & Biddle, 1999). Aspects such as physical condition and split times were considered task-relevant and associative, while daydreams and taking in the scenery were task-irrelevant and dissociative. Similarly, physical conditions were an internal association (inward monitoring), and split times were an external association (outward monitoring). Daydreams were considered to be internal dissociation (inward distraction), and the scenery was external dissociation (outward distraction).

Research by Heffner (2006) supported the findings that association during a race is positively related to amount of training miles run during preparation for the race. Additionally, runners who had accumulated more training miles showed a greater increase in association used in the competition compared to the amount used in training, suggesting that experience with a task can result in an increased attentional focus during competition. However, in non-competitive situations such as training, previous experience did not appear to influence the amount of association. Heffner also suggested that negative affect due to perceptions of pain may interfere with association. Athletes who have more experience in training may be more prepared for pain as they have dealt with it in preparation for the race. As such, they may be able to associate more during the competition because they are desensitized to the physiological indicators of fatigue, and thus perceive these signals with less negative affect than less trained runners.

### *Focus*

There are several definitions of focus in the literature (Abernethy, 2001; Shaw, Gorely, & Corbin, 2005), which suggests that the difficulty of the subject is not in defining the term but rather in understanding the concept. Focus has been included in definitions of attention and concentration, with attention being defined as a “focalization, concentration of consciousness,” (Weinberg & Gould, 2003, p. 353) and concentration as “focusing on the relevant cues in the environment; maintaining that attentional focus over time... and shifting attentional focus when necessary,” (Weinberg & Gould, p. 353). Based on the literature, it appears that concentration is generally related to the appropriate response to stimuli (Weinberg & Gould; Wilson, Peper, & Schmid, 2006), while focus incorporates aspects of being in the moment and what the attention is specifically being directed towards (Orlick, 2008; Wilson et al.). For the purpose of this study,

the term 'focus' will be used, however, each study will be described according to the terms used in the respective literature. Orlick provided a clear description of focus:

A positive, absorbing focus channels your commitment into a series of positive actions, thereby making your personal journey to excellence possible. A fully connected focus releases you from everything irrelevant and connects you firmly with your experience or performance. Focus is a state of mind where nothing exists apart from your connection with what you are engaged in or experiencing at the moment. (p. 190)

More simply, focus is the complete connection with the step immediately in front of you (Orlick, 1998). The ability to achieve this fully connected focus is one of the most critical skills associated with consistent high-level performance and is essential in facilitating ongoing learning (Kabush & Orlick, 2001; Krane & Williams, 2006; Ravizza, 1977). Some researchers argue that focus is the most critical skill related to successful performance (Abernethy, 2001; Cox, 2007; Orlick, 2008; Wilson et al., 2006).

#### *Best and Worst Focus*

Orlick and Partington (1988) conducted interviews with 291 Canadian Olympic athletes, and demonstrated that most elite athletes knew what their best focus was, and could direct and control this focus in order to remain connected with what they were doing. A study by Jackson and Roberts (1992) examined Division I college athletes in a variety of sports and found that the best performers were those who had a total focus on performance, while concern with the outcome was linked with worst performances. A worst, or less than best focus occurred when factors outside of the athlete's control were dwelled on, such as outcome or other competitors. Orlick and Partington demonstrated that in these worst focus situations, the athlete allowed

distractions to arise that take away from his or her focus on the controllable steps that need to be taken to have a best performance.

Research by Gould, Eklund, and Jackson (1992a) examined US Olympic wrestlers and their pre-competition states. Results demonstrated that before an optimal performance, athletes had positive expectancies, optimal arousal states, were committed, completed pre-competition routines, and were focused on tactical strategies. In contrast, those athletes who had worst Olympic performances reported being negative and having irrelevant, irregular or negative patterns of thought. Additionally, these athletes were not adhering to their pre-competition routines. Gould, Eklund, and Jackson (1992b) demonstrated that during best Olympic performances, sensations of confidence and optimal intensity were present. Additionally, the participants had total concentration, were focused on strategy, and used focusing and refocusing methods. In contrast, those athletes who had worst performances displayed negative and ineffective cognitive patterns, and were unable to focus on the task or strategy.

Recently, research has examined focus in more detail. Kabush and Orlick (2001) demonstrated that elite mountain bike riders used a variety of focusing techniques while racing, including staying relaxed, breathing, and pedaling. The participants indicated that they used a mixture of internal and external focus, and that internal focus was mainly used during their best performances. In these best performances, the participants focused on staying relaxed and positive. It was found that focus shifted throughout the race between pacing, position in the race, internal feelings, and reminders for technical components of the course.

A study by Grand-Maison (2005) looked at the mental skills that elite Ironman triathletes used to get themselves mentally ready for the competition. Results

demonstrated that these athletes used several strategies to ensure that both their bodies and mind were completely prepared for the competition. The participants reported following detailed race plans and routines, which included focusing, controlling pain or discomfort, dealing with distractions, and ensuring that proper nutrition was obtained throughout the race. It was found that the participants had detailed focusing strategies as well as techniques for dealing with distractions, and placed emphasis on concentrating on the immediate task (swimming, biking or running).

### *Focus and Mental Skills*

Past research has focused on mental skills interventions with athletes. A study by Bull (1989) examined the use of a mental training package on the performance of an ultra-distance runner (who was completing 500 miles in the deserts of North America in 20 days). The skills utilized in the study included imagery, relaxation, and self-talk, all of which were found to improve running performance. Another study looked at the use of a mental training package in triathletes during 1600m runs (Patrick & Hyrcenko, 1998). The intervention consisted of imagery, relaxation, self-talk and goal setting. Results indicated a positive relationship between the use of the mental training techniques and 1600m running performance. These two studies demonstrated that mental training techniques can be beneficial for runners over a wide range of distances. This topic was expanded upon by Thelwell and Greenlees (2003), who, after a mental skills training intervention involving relaxation, self talk, imagery, and goal setting, attempted to determine at what point in a performance different mental skills were used in an endurance gymnasium triathlon (consisting of rowing, cycling, and running). Results demonstrated that following the intervention, relaxation strategies were employed prior to the performance, imagery was used for dealing with pain and fatigue, and self-talk was used both before the

performance as well as during the later stages of the event. The results from this study also demonstrated that several mental techniques could be combined to benefit the runner's performance (for example, using relaxation and self-talk techniques together).

A study by Orlick and Partington (1988), conducted with Olympic athletes, demonstrated that there are several characteristics common to success. This study found statistically significant links between successful Olympic performance and mental skills such as setting clear daily goals, imagery, simulation training, mental preparation for competition, distraction control, competition focus, and competition evaluation.

Taylor (1995) argued that different sports require different mental preparation techniques, based on the physical, technical, and logistical demands of the sport. For example, a sport such as sprint cycling that requires explosiveness will involve different mental preparation than an endurance sport such as marathon running. Additionally, the length of the sport event will influence the pre-competition mental preparation; an event that lasts only three minutes will require different preparation than an event that is three hours in duration. Taylor argued that endurance sports require the ability to shift focus in order for optimal performance to occur.

### *Self-talk*

Several studies have looked at the influence of self-talk on performance. Self-talk is seen as the critical element to cognitive control (Zinsser, Bunker, & Williams, 2006), and is what individuals say to themselves in order to focus their attention on the task they are performing (Anderson, 1997). These statements can help the athlete to stay focused in the moment and not dwell on mistakes or think too far ahead (Zinsser et al.). Self-talk contains motivational and task oriented subsets. Motivational self-talk can be used to maintain and increase effort, and remain focused on goals, both of which are essential prior to and during endurance events. Task oriented

self-talk consists of statements that give specific reminders about how to correctly perform desired movements in order to achieve optimal performance (Donohue, Barnhart, Covassin, Carpin, & Korb, 2001). Research by Gould et al. (1992b) demonstrated that task-oriented self-talk can enhance focus, enabling the participant to be connected to what he or she is doing in the moment. Wrestlers in the study who had successful performances reported using task-oriented self-talk more frequently during competition as compared to those athletes who were less successful.

Self-talk can be used to help athletes gain and maintain focus (Gould et al., 1992a, 1992b; Hardy, Gammage, & Hall, 2001; Landin & Hebert, 1999). With the use of pre-determined verbal cues, athletes can maintain an appropriate focus that enables them to connect with what they are doing in the moment. This connection with the present moment gives the athlete the best chance to have a successful performance (Zinsser et al., 2006). A study by Hardy et al. examined varsity athletes and the 'where, when, what, and why' functions of self-talk through the use of an open-ended questionnaire. Results demonstrated that skill-specific self-talk was used to enhance focus on task-relevant cues (for example, "keep my head up").

A study by Donohue et al. (2001) demonstrated that both motivational and instructional (or task) statements improved performance in Division I female cross country runners, and were associated with optimal performance. This supports earlier findings by Weinberg et al. (1984), which suggested that positive self-talk can be used to enhance endurance performance. Additionally, shifting cue words throughout a competition may assist an athlete in responding to the changing demands of the event. These cue words enable the athlete to appropriately shift his or her focus in order to adapt to the requirements of the competition, allowing him or her to remain connected with the task at hand (Weinberg et al.).

### *Imagery*

Imagery is defined as “using all the senses to re-create or create an experience in the mind,” (Vealey & Greenleaf, 2006, p. 307). This skill allows athletes to rehearse their performance in their mind before they actually compete, as it mimics an actual experience, and can involve not only images but also body feelings, sounds, tastes, and smells (White & Hardy, 1998). Imagery was studied in track and field athletes at the 1988 Olympic Trials and Games, with athletes who qualified for the Olympics being compared to those who failed to advance (Ungerleider & Golding, 1991). It was found that athletes who were successful in qualifying were more likely to use imagery than athletes who did not qualify for the Olympics.

Imagery has been shown to enhance competition thoughts and emotions of athletes, enabling an effective pre-competition and competition focus (Weinberg & Gould, 2003). The use of imagery can help athletes focus on task-relevant aspects of their performance. An imagery training intervention program with a national softball team resulted in an increased selective attention capacity (Calmels, Berthoumieux, & d'Arripe-Longueville, 2004). This imagery intervention included imagery sessions where participants were guided to include both internal and external stimuli, which helped participants to practice focusing on relevant and irrelevant cues.

### *Focus Characteristics*

Nideffer and Sagal (2006) stated that the appropriate type of focus depends on the skills that the sport requires as well as the situational demands. In order to focus effectively, the athlete needs to be able to control his or her *width* of attentional focus, which can range from narrow to broad. Sports such as hockey and soccer require a broad focus, while diving and shooting require a narrow focus. Additionally, the *direction* of an athlete's focus must be controlled, ranging from

an internal focus to monitor aspects such as muscle sensations, to an external focus on things such as other opponents. Shifts in focus can occur in response to the situational demands of the sport, such as switching from an external to an internal attention or from a broad to narrow attention (Nideffer & Sagal).

Situation awareness is another aspect of concentration as defined by Weinberg and Gould (2003). This awareness of the environment and various stimuli enables athletes to base their decisions on a variety of conditions, such as other players and the game situation, in order to respond accordingly. These reactions often occur under competitive pressure and time constraints. Training and competition allows the athlete to practice their focus in a number of situations. This experience has been shown to enhance the ability to refocus after a distraction, allowing the athlete to return his or her attention to the task at hand as opposed to thinking about the disturbance (Wilson et al., 2006). However, while it is important for athletes to know how to control their focus, it is equally important for them to know what to focus on. Attending to the wrong cues will not result in an effective utilization of focus (Wilson et al.). Focusing on relevant cues in the environment, or selective attention, is an important aspect of concentration (Weinberg & Gould). This selectivity allows the individual to focus on cues that are the most relevant to his or her performance while disregarding irrelevant signals (Abernethy, Summers, & Ford, 1998).

Process goals enable the participant to focus on the performance by specifying the procedure that will enable the athlete to have a successful performance. These process goals serve to keep the participant focused in the moment by applying task-relevant strategies (Gould, 2006). Process cues are those that encourage the individual to be engaged in the process of executing his or her performance as opposed to being concerned with the outcome. As a result,

the individual can choose specific cues that are most relevant to connecting him or her with the moment (Nideffer & Sagal, 2006). Verbal and kinesthetic cues can be utilized in order to achieve and regain focus once it has been lost. This allows the athletes to avoid distracting thoughts and events by using cues to focus on the task at hand (Schmid, 1982). However, these cues must be individualized, as different athletes will use different visual and kinesthetic cues in order to trigger their optimal focus. A cue that is effective for one athlete may not work for another (Wilson et al., 2006)

Results from studies by Brewer, Van Raalte, and Linder (1996) and Okwumabua, Meyers, Schleser, and Cooke (1983) demonstrated that attentional focus may be related to previous experience in an endurance sport. Okwumabua et al. (1983) examined attentional focus during timed running of a 1.5 mile course over five weeks, and found that regardless of the assigned cognitive strategy, participants used progressively more association throughout the length of the study. Brewer et al. examined the attentional focus of cross country runners and college students with no running background when performing a stair climbing task. Results demonstrated that the cross country runners used more association than the college students. These results suggest that attentional focus may be influenced by endurance experience even in a novel task.

### *Distractions and Coping*

Distractions can occur in the form of external stimuli, such as competitors or spectators, or internal information, such as fatigue or thinking of past failures (Abernethy, 2001).

Distractions are included in the concept of selectivity, as the athlete must determine what is informative and relevant to his or her performance. Additionally, stimuli that are not important to the athlete's performance must be ignored (Abernethy). When athletes lose focus, fear and self-

doubt can set in, which, if not dealt with, can further inhibit concentration, creating a vicious cycle. As a result, effective focus and the reduction or elimination of self-doubt and anxiety can significantly improve performance (Wilson et al., 2006).

Coping has been defined as “a constantly changing cognitive and behavioral effort to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141). Lazarus and Folkman categorized coping responses as problem-focused and emotion-focused. An individual’s coping potential is related to the amount of control or perceived control that they have over the stressor. When there is greater control, problem-focused coping mechanisms are typically used, while emotion-focused coping mechanisms are primarily employed when there is little control over the stressor. An attempt to reduce or eliminate the threat through cognitive or behavioural responses is problem-focused coping, while emotion-focused coping uses strategies to regulate emotional arousal and distress, regardless of whether the stressor changes or remains unchanged.

Research has demonstrated that athletes prefer problem-focused coping strategies over emotion-focused coping strategies (Ntoumanis & Biddle, 2000), and find problem-focused coping mechanisms to be more effective in dealing with sport challenges (Crocker & Graham, 1995). However, literature on coping in sport suggests that different coping responses should be employed to deal with different stressors (Gould, Eklund, & Jackson, 1993; Madden, Kirkby, & McDonald, 1989). A study on the coping strategies used by 1988 U. S. Olympic wrestlers demonstrated that a combination of mechanisms were used, including thought control strategies, task focusing strategies, behavioural-based strategies, and emotional control strategies (Gould et al.). Additionally, successful athletes had developed more effective coping strategies, which often required little conscious effort, and had been practiced in training. Gould et al. suggested

that coping is a dynamic, complex process that uses a number of strategies in combination to deal with a stressor.

Dale (2000) examined the distractions and coping mechanisms of track and field decathletes during their most memorable performances. Each athlete recalled a performance where he not only performed well, but also was able to successfully deal with less than ideal situations. These athletes faced distractions such as lack of confidence, fatigue, pain, fear, other competitors, weather, a bad event, and the 1500m run. A variety of coping mechanisms, both problem-focused and emotion-focused, were used to deal with these stressors, including using visualization and imagery, being aware of cues, competing only with themselves, having confidence in their training, being consistent, and having camaraderie. Although these athletes were experiencing a number of distractions, they were aware that the distractions needed to be addressed, and were able to determine how to effectively handle the situation. By establishing what was relevant to their performance and what was not, the athletes were then able to concentrate only on relevant cues and the task at hand.

A study by Buman, Omlil, Giacobbi Jr., and Brewer (2005) examined the experiences of recreational runners and hitting the wall (HTW), which was defined from a physiological perspective as occurring when "... glycogen supplies have been exhausted and energy has to be converted from fat" (Stevinson & Biddle, 1998, p. 229). Buman et al. suggested that HTW has five characteristics: affective, behavioural, cognitive, motivational, and physiological. Coping strategies for dealing with HTW included cognitive strategies (such as mental reframing), emotion-focused coping (such as affective control), race-related physical efforts (such as attempting to reduce physical demands), and no strategies. It was found that multiple strategies were used to deal with the many characteristics of HTW. Differences in cognitive coping

strategies were noted between higher and lower performing runners, with higher performing athletes using cognitive coping strategies to enhance performance, while lower performing athlete used cognitive coping strategies to deal with the physical discomfort of HTW or to remain positive in their self-perception. Although it is yet to be fully examined and supported by literature, attentional focus very likely has a role as a mechanism for coping with fatigue and in contributing to the psychological and physiological utilization of resources (Heffner, 2006).

### Conclusion to Review of Literature

Focus is one of the most important mental skills required to experience success in any performance domain (Krane & Williams, 2006; Orlick, 2008; Orlick & Partington, 1988; Wilson et al., 2006). Research on sport psychology and the mental skills required to achieve optimal performance levels has made great improvements over the past 30 years, moving from personality traits of athletes to understanding specific skills and techniques that can help elite athletes excel. Additionally, focus has been examined in a variety of contexts and has been shown to improve performance (Krane and Williams, 2006). However, despite the increasing popularity of marathon running (Lynch & Scott, 1999), qualitative research has yet to thoroughly examine how elite marathon runners use focus to enhance their performance and what they are specifically focusing on.

The purpose of this study was to examine the focus utilized by elite marathon runners, specifically the focus that they use during best and worst competitions, what happens if and when their focus is lost, and techniques used to regain focus when it is lost. This research attempted to answer the following research questions: (a) what are elite marathon runners focusing on when they are performing at their optimal level? (b) is focus lost and why? and (c) how do elite marathon runners regain their focus if/when it is lost?

It was hoped that this study would fill a gap in the literature, leading to a more comprehensive understanding of the focus used by elite marathon runners. It was expected that insights would be gained as to what elite marathon runners are actually focusing on throughout the competition, what happens when they lose their best focus, and how this focus is regained when it is lost.

## CHAPTER THREE

### Methodology

The purpose of this study was to examine the focus that elite marathon runners use during competition. Qualitative interviews were conducted with ten elite marathon runners. Data was inductively analyzed using interpretive phenomenological analysis. It was hoped that the results from this study would help fill the gap in the literature on the focus used by elite marathon runners.

The methodology section presents the research paradigm and research design. The researcher/interviewer's preparation and experiences are described, as is the credibility of the research process. Then, the participants who took part in the study are introduced, and the data collection and analysis procedures are outlined. Finally, the steps taken to ensure trustworthiness are described.

#### *Constructivist*

The epistemology that was used in this study was constructivist, which enabled understanding and reconstruction of the topic (Guba & Lincoln, 1994). Each athlete who was involved in the study provided his or her own experience and ideas as to which focusing techniques work best for him or her in order to achieve their optimal performance level. There is no single, correct way to mentally prepare for a marathon, and the epistemology allowed each individual to relate his or her own personal view. Constructivism considers each individual's unique perspective, and each perspective is considered to be valid (Crotty, 2003). Perspective is based on experiences, and experiences are something that cannot be challenged, as they are unique to each person. Every individual has a way of finding meaning and making sense of the world, and each way is considered valid. The use of constructivism allowed the researcher to

approach the study in an open manner so that new or expanded meaning had the opportunity to emerge (Crotty).

Constructivists do not believe that there is one objective truth that exists, nor do they believe that there is one correct interpretation of events. Rather, reality is something that changes with each person and context, with no one reality being considered better than the other (Plack, 2005). Constructivism asserts that the only way in which reality can be known is through experience. Learning, like knowledge, is a dynamic process, allowing a person's perspective to change continually. The researcher is the primary research tool, allowing the perspectives of the participants to surface (Patton, 2002). Constructivist researchers strive to understand the perspectives shared and the meanings that exist for each individual (Plack).

### *Qualitative Research*

As this was an exploratory study, a qualitative approach was used. Recent research demonstrates that there has been a shift towards qualitative research in sport psychology, and shows that the interview was the most common method for data collection (Culver, Gilbert, Trudel, 2003). The use of qualitative research allows the study of people's experiences based on what they say and how they act (Tesch, 1990). The goal of this study was to explore the focus used by elite marathon runners.

A phenomenological approach was taken in this research design. Smith and Osborn (2008) explain that phenomenology is an exploration of people's unique everyday lived experiences, and allows the essences that are essential to these experiences to be uncovered. The aim of phenomenology is to "identify, understand, describe and maintain the subjective experiences of the respondents," (Crotty, 2003, p. 83). Van Manen (1990) states that "phenomenological reflection is not *introspective* but *retrospective*. Reflection on lived

experiences is always recollective; it is reflection on experiences that is already passed or lived through,” (p. 9-10). Because phenomenology seeks to understand the participants’ experiences, the analysis does not impose meaning on the results; instead, the themes rise out of the data (Crotty). Therefore, the results of this study reflect the essential elements of focus and refocusing techniques according to the participants, and allow exploration of the themes that characterize the meaning applied by the participants to the concepts of focus and refocusing. Interpretive phenomenological analysis permits a description of the essences of focus and refocusing techniques as explained by multiple participants, allowing their experiences to be understood in a new manner (Smith & Osborn).

#### *Personal Preparation and Experiences*

Although I, Lisa Benz, have not completed a marathon, I have been a competitive distance runner for several years and understand the effort, dedication, and hard work that accompany being a serious runner. I have also talked to numerous marathon runners of a wide range of ability and read several books detailing the competitions and daily training life of a serious runner. Being immersed in the sport has allowed me to know and understand the jargon that is used by runners. Based on these factors, I consider myself knowledgeable about the sport of running, which increased my legitimacy as a researcher. In qualitative research, the researcher is the major instrument of data collection and analysis, making his or her credibility very important (Patton, 2002). My experience and knowledge in the sport allowed me to conduct meaningful interviews and to ask in-depth questions, which elicited more detailed responses from the participants.

Additionally, as I have not completed a marathon, I was potentially less likely to influence the results with my personal biases than if I had run a marathon. Due to my lack of

marathon experience, I was not able to compare my own marathon experiences with the experiences of the participants. Although there are similarities between competing in shorter distance races as compared to the marathon, there are also differences, and as a result, I was less likely to impose my own views and experiences in shorter distance races on the marathon experiences of the participants.

### *Credibility*

The constructivist approach states that training and learning occurs through active engagement in the research process (Guba & Lincoln, 1994). In preparation for conducting the interviews, I attempted to gain as much information as possible from a variety of sources including graduate-level classes, books, reviewing past interview studies, and conducting pilot interviews. This knowledge allowed me to prepare for and conduct the interviews. During the interview process, I kept a personal journal in order to continually reflect on the process and to encourage growth, self-awareness, and ongoing learning. This process encouraged *reflexivity*, which allowed me to reflect on my involvement in the research while I was actually immersed in the process (Lincoln, 2002). An increased consciousness directly influenced the data collection, as it allowed me to reflect on the process and obtain more meaningful information from the interviews. By encouraging and developing self-awareness I was able to examine and address existing personal biases, and work towards neutralizing their influence (Rubin & Rubin, 2005). Additionally, the process of journaling allowed credibility through transparency, which occurs when notes or recordings are kept that demonstrate the process of data collection and analysis (Rubin & Rubin).

### *Participants*

As the term *elite* does not have a common standard of athletic achievement within the marathon, for the purposes of this study it was defined as an athlete who has competed at an international level. International competitions for the marathon include the Olympic Games, the International Association of Athletics Federation (IAAF) World Championships, the Commonwealth Games, and the World Marathon Majors (including the London, Berlin, Chicago, New York, and Boston marathons). Purposeful sampling requires that information-rich cases be selected in order to allow insight to, and understanding of the topic (Patton, 2002). Through the establishment of appropriate selection criteria, participants can be selected who enable the topic to be explored in depth (Merriam, 1988). For the purposes of this study, the selection criterion was based on the above definition of ‘elite.’

Through major marathon race directors and snowball sampling (Patton, 2002), potential participants were sent an email containing general information about the study. A detailed letter of information (Appendix A) and a consent form (Appendix B) were also attached, which specifically outlined the purpose of the research and their role as a participant. Interested participants replied to the researcher through email, and further communication ensued to clarify any questions, and to arrange a time for the interview. The researcher had no previous contact with any of the participants in the study. Each participant understood that his or her involvement in the study was voluntary and that he or she could drop out at any point without repercussion. None of the participants in the study dropped out. Additionally, as the nature of the questions made the participants identifiable, participants were given the option to make the identities known or to remain anonymous. All participants chose to make their identities public.

Ten participants, five elite males and five elite females (Appendix C), were recruited from three countries: Canada, the United States, and Great Britain. The following participants were recruited, and are listed along with their marathon personal best (PB) time: Bruce Deacon, 2:13:35; Hayley Hainings, 2:29:18; Ryan Hall, 2:06:17; Magdalena Lewy-Boulet, 2:30:19; Matt McInnes, 2:16:59; Tara Quinn-Smith, 2:33:58; Brian Sell, 2:10:47; Nicole Stevenson, 2:32:56; Dylan Wykes, 2:15:15. One participant, Cheri Blauwet, 1:39:53, is a wheelchair athlete. Table 1 describes the athlete profiles of each participant.

Table 1

## Athlete Profiles

| Participant                | Country       | Personal best<br>marathon time and date     | Number of<br>marathons <sup>1</sup> |
|----------------------------|---------------|---|-------------------------------------|
| Cheri Blauwet <sup>2</sup> | United States | 1:39:53, Boston 2004                        | Seventeen                           |
| Bruce Deacon               | Canada        | 2:13:35, London 1994                        | Guessed between<br>30-40            |
| Hayley Hainings            | Great Britain | 2:29:18, London 2008                        | Six                                 |
| Ryan Hall                  | United States | 2:06:17, London 2008                        | Three                               |
| Magdalena Lewy-Boulet      | United States | 2:30:19, US Olympic<br>Marathon trails 2008 | At least 10                         |
| Matt McInnes               | Canada        | 2:16:59, Ottawa, 2008                       | Six                                 |
| Tara Quinn-Smith           | Canada        | 2:33:58, Ottawa, 2008                       | One                                 |
| Brian Sell                 | United States | 2:10:47, Chicago, 2006                      | Guessed seven                       |
| Nicole Stevenson           | Canada        | 2:32:56, Houston, 2006                      | Twenty                              |
| Dylan Wykes                | Canada        | 2:15:15, Rotterdam, 2008                    | Two                                 |

1. At time of interview

2. Wheelchair athlete

*Instrument*

A semi-structured interview was conducted with each participant, allowing an in-depth understanding of the focus used by elite marathon runners (Rubin & Rubin, 2005). All questions were open-ended so that the participant had the opportunity to provide as much detail as was necessary to fully answer the question (Rubin & Rubin). This qualitative method permits flexibility in the interviews, allowing specific topics to be explored in detail (Smith & Osborn, 2008). The interview began with general questions to get the participant talking about his or her experiences as a runner and then moved to specific questions relating to focus, including a grand-tour question (Creswell, 2007) regarding the participant's best marathon (Appendix D). The grand-tour question is the basic form of research questions in qualitative research (Creswell). The main interview questions were structured so that the participant's best marathon and his or her focus leading up to and during that race could be thoroughly examined. In addition, the participant was asked to describe any distractions or potential distractions that he or she experienced, and how the distractions were dealt with. The participant was also asked to describe his or her focus in a worst marathon, which was compared with the focus used in the participant's best marathon.

Prior to the study, pilot interviews were conducted with two sub-elite participants. These participants compete in the marathon at a high level and would be considered elite by some standards, but did not meet the inclusion criteria of the study. These participants were recruited through personal contacts of the researcher. These pilot interviews allowed the interview guide to be tested in order to verify the effectiveness of the questions, and gave myself practice using the interview questions. The research supervisor and I reviewed the transcripts of the interviews in order to determine points that could have been probed in more detail, questions that could have

been asked, and the overall strengths and weaknesses of the interviews. No changes were made to the interview guide following the pilot interviews.

Probes and follow-up questions were used throughout the interviews for the study in order to encourage the participants to elaborate and provide more detail on certain topics. Interviews were audio recorded and transcribed verbatim, producing a total number of 262 double-spaced pages of data.

Seven of the thesis participants were interviewed in person, and due to geographical constraints, the remaining three were interviewed over the phone. Consistent with past research (Sturges & Hanrahan, 2004), no difference in quality of material was found between the interviews conducted over the phone as compared to those done in person, and rich, detailed data was obtained through both methods. The interviews occurred at a time and place that had been previously arranged by the participant and the researcher, and were typically 60 to 90 minutes in length. Due to time constraints in one interview, and audio recording troubles during the last few minutes of another interview, two follow-up interviews, which lasted about 15 minutes each, were conducted over the phone in order to complete the missed interview questions.

### *Data Analysis*

Interpretive phenomenological analysis (IPA) was used to analyze data (Creswell, 2007). The first step in data analysis was to listen to the recordings of the completed interviews and transcribe them. After each interview was completed, including the follow-up interviews (conducted with two participants), participants were sent a copy of their transcribed interview. Each participant was asked to read over their interview to ensure that it accurately represented their thoughts, feelings, and focus strategies and techniques. If any follow-up questions had emerged during the transcription process, those were included when the transcribed interview

was sent to the participants. Upon receiving their transcript, participants had the opportunity to add, delete, or clarify information, and were asked to return the transcript to the researcher within two weeks of receiving it. This process empowered each participant to ensure that his or her comments were accurately transcribed and allowed an opportunity for questions or concerns to be voiced. Some minor changes were made by the participants to the transcripts in order to expand on or clarify information within the interview.

As soon as the first interview had been completed, data analysis began. Recording each interview gave me the ability to listen to and examine the first interviews in search of themes that were possibly emerging from the data. The coding process required me to examine the data, providing insight on the direction that further data collection should pursue. By coding the data early in the research process, areas may be uncovered that should be explored in order to strengthen and complete the data collection (Charmaz, 2000).

After the interview transcripts were verified by the participants, the data was analyzed inductively. Words and phrases were coded into meaning units (Smith & Osborn, 2008). The coded meaning units were then clustered according to similarity, and classified into themes that represented an aspect of the participant's focus. Themes were determined not only based on their prevalence within the data, but also on the richness of the passage, as well as how the theme contributed to illuminating other emerging themes (Smith & Osborne). After themes were determined for each participant, comparisons were made between participants in order to determine general and unique themes for all the interviews. To determine which themes were essential to the experience of focus, themes were examined by asking: "If this theme were not present, would the experience of focus, as described by the participants, exist?" Those themes that were not essential to the experience of focus and refocusing to the participants were

eliminated. This process was reviewed by both the research supervisor and colleagues in order to verify the elimination and selection of themes (Smith & Osborn).

Figure 1 – Examples of data analysis and development of themes

| Raw data<br>meaning units   | Higher order<br>sub-themes | Higher order<br>themes | General<br>Dimensions |
|---|----------------------------|------------------------|-----------------------|
| Tried to optimize conditions                                      |                            | Positive               | Best focus            |
| Enjoyed the process   |                            |                        |                       |
| Positive, relaxed state   |                            |                        |                       |
| Focused on anything to get<br>positive about                      |                            |                        |                       |
| Able to execute fully on race day                                 | Confidence                 |                        |                       |
| Had the ability to meet goals                                     |                            |                        |                       |
| Drew on past running experiences                                  |                            |                        |                       |
| Got the most out of body  | Doing one's best           |                        |                       |
| Did the very best possible  |                            |                        |                       |
| Connected with the race   |                            | In the moment          |                       |
| Completely present in the moment                                  |                            |                        |                       |
| Everything else fell away   |                            |                        |                       |
| Had a strategy to guide the race                                  | Executing the race         |                        |                       |
| Believed in the race plan regardless<br>of what others were doing | plan                       |                        |                       |
| Reassessing the environment                                       | Responding to the          |                        |                       |
| Ready to improvise during the race                                | race                       |                        |                       |
| Monitored competitors   |                            |                        |                       |
| Responded to the moment   |                            |                        |                       |
| Aware of signals from body  |                            | Body awareness         |                       |
| Monitored and interpreted body                                    |                            |                        |                       |
| Read signs of fatigue/feeling good                                |                            |                        |                       |
| Focused on how body feels   |                            |                        |                       |
| Trained to know the pace  | Pace                       |                        |                       |
| Always reassessing the pace                                       |                            |                        |                       |
| Checked splits at the mile/kilometre                              |                            |                        |                       |
| Relaxed shoulders   | Form                       |                        |                       |
| Kept a good cadence   |                            |                        |                       |
| Pumped arms   |                            |                        |                       |
| Concentrated on staying relaxed                                   | Physical relaxation        |                        |                       |
| Stayed relaxed for as long as possible                            |                            |                        |                       |
| Focus is a gradual thing  |                            | Progressive intensity  |                       |
| Didn't want to be really focused at the<br>beginning of the race  |                            | of focus               |                       |
| So much time later to focus intensely                             |                            |                        |                       |
| Focus became more important as the<br>race progressed             |                            |                        |                       |

*Continued*

*Figure 1 – Continued.* Examples of data analysis and development of themes

| Raw data meaning units  | Higher order sub-themes       | Higher order themes                              | General Dimensions |
|---|-------------------------------|--|--------------------|
| Had negatives thoughts<br>Unable to become more positive<br>Went from bad to worse<br>Threw in the towel when things weren't going well<br>Became discouraged<br>Had troubles replacing negative thoughts with positive thoughts<br>Not leaving an incident behind<br>Not lost in the moment<br>Not able to regain control<br>Unable to refocus after a distraction<br>Not focusing on aspects that will lead to a best performance | Losing hope vs. encouragement | Negative vs. positive                            | Worst focus        |
| Realized that there are aspects of marathon running that can't be controlled<br>Stopped thinking about that distraction<br>Nothing that could be done about that distraction  |                               | Accepting control and lack of control            | Refocusing         |
| Used positive thoughts and confidence from training<br>Found a way to encourage self through the distraction<br>Had to manage thoughts  |                               | Reworking distractions: negatives into positives |                    |
| Used objective measures such as pace, form, running relaxed<br>Focused on something to work towards<br>Focused on something that there was control over   |                               | Replacing distractions                           |                    |

*Trustworthiness*

Patton (2002) lists that the following are sets of criteria for judging the credibility and quality of constructivist qualitative inquiry: subjectivity acknowledged (discusses and takes into account biases), trustworthiness, authenticity, triangulation (capturing and respecting multiple perspectives), particularity (doing justice to the integrity of unique cases), enhanced and deepened understanding, and contributions to dialogue. The current study attempted to integrate these criteria in order to develop credibility and enhance the quality of the research.

The current study utilized analyst triangulation, as the research supervisor reviewed the findings, interpretations, and conclusions in order to develop consistency (Patton, 2002). The involvement of the supervisory researcher as well as peers in the data analysis process allowed for discussion and debate of interpretations in order to reduce the bias of a single observer. Member checking was used to confirm the findings (Guba & Lincoln, 1994). Each participant received his or her transcribed interview, and interpretations and conclusions of the study were sent back to all the participants so that they could ensure the correctness of the results. This allowed the participants to have a voice not only in verifying that what they had said was accurately transcribed but also that the interpretation of what they had said was correct. The participants' feedback verified and confirmed the interpretations and conclusions that had been made (Patton). As described earlier, my personal biases were examined and addressed through self-awareness and journaling throughout the research process.

## CHAPTER FOUR

## Results

*Best focus*

The first research question attempted to answer the following question: What are elite marathon runners focused on when they are performing at their optimal level? Four elements that were essential to a marathon best focus, as described by the participants, emerged from the results: being positive, being in the moment, having body awareness, and employing a progressive intensity of focus. From these themes, a definition of marathon best focus can be composed based on the phenomenological interpretation of the participants' experiences: *marathon best focus is a positive connection to the moment and to one's body awareness, which becomes increasingly more intense as the race progresses.*

*Positive*

The aspect of remaining positive was an essential component of focus that emerged from the results. A positive perspective enabled the athletes to perceive the experience in a constructive manner as well as to manage their thoughts in order to approach and respond to the race with a perspective that allowed them to race their best. Lewy-Boulet explained how a positive focus helped her during her best race: "Everything was so good about that race. It was all positives." Similarly, Hainings also had a very positive focus in her best marathon: "I don't think I ever did [have negative thoughts] in that race... in [the] London [marathon] I don't think I was ever negative about anything."

Wykes outlined that his focus moves from using positive thoughts in the first half of the marathon, to focusing on his form and feeling positive through that in the latter stages of the race:

In the early stages of the race, it's focusing on telling myself that the pace is easy and that I'm going to be able to get through it no problem. And then in the later stages of the race I think focusing on my form really helps me get through it. It's running tall and strong, I just feel like even though I'm probably not running so fast, it feels good and that keeps me positive.

Positive aspects include having confidence from training, and doing one's best.

*Confidence from training.* The participants discussed the importance of having confidence from training. This confidence enables the participants to eliminate doubts and instead focus on what they wanted and needed to do in order to have an optimal performance. Sell commented, "I think a lot of focus and/or confidence comes in the months before in the training leading up to it." Quinn-Smith added, "It's focusing on what I feel that I'm ready to do given the experience in workouts and just to feel confident going into races. Knowing that I'm there, ready to go." Stevenson related confidence to writing an exam, explaining that confidence is gained through training:

I think about all the work that I've put into it. And I often liken it to taking an exam. You've gone to all the classes, you've done your homework, on race day it's just telling the world what you know. So I think back on that because you get a lot of strength from that. You run a lot of 20 mile runs and enter new territory in your belief in your ability.

Several of the participants described that in their first or second marathon, when they didn't have many other experiences to draw confidence from, having confidence from training was important. McInnes described:

With any race, especially the marathon though, the accumulation of mileage and long runs and hard sessions are essential to be able to run with confidence, especially when you're doing it for the first or second time. It's a little bit easier when you've done it several times and you have a little more confidence based on your experience rather than the training. The first few times you really need the confidence from the training.

Quinn-Smith expanded on how the training helped her before her first marathon:

When you've done all that [training] you think, 'okay, I'm ready.' You have that confidence from the training and from the different things that you've done on the way there. And it helps I think. At least I felt it helped me anyways. It helped me feel prepared and I didn't have to stress or worry.

Deacon described the process of gaining confidence in himself by changing his training environment and observing how other elite marathon runners approached the sport:

And it [his observations and experiences] just got me thinking more along the lines of 'I'm a professional.' Instead of thinking 'oh, I hope I have a good race,' it was "well why wouldn't I have a good race?" And at the same time I was entering into the profession of teaching and so I saw the way that professionals think. My dad was a dentist and I started thinking along the lines 'well my dad doesn't wake up in the morning and say 'gee, I hope I don't drill through somebody's cheek.' He's a professional, he expects certain things of himself, he expects that he can perform on the day due to the training and the education that he's had. And so why would it be any different? Because I've done the work, why can't I perform on the day? And it just really changed the way that I approached things from a

mental perspective. ...I think a lot of it was that I got myself into a different place mentally where I actually started to believe that I could do something and that I could reach the levels of being on an Olympic team.

*Doing one's best.* Uniquely, Hall was the only athlete who specifically mentioned focusing on doing his best. He explained that this focus allowed him to push himself to get the most out of his body:

The biggest focus is for me just to do my best. That's huge for me, because I can't do better than my best, and if I do my best, then what else can I do, then I don't have any regrets. That's really something that really you hear a lot, it's definitely a big cliché in the athletic world, but I think it's that way because it's really true. And you can't demand anything more out of your body than what you've prepared it to do. ...And for me, it's do my very best for a cause too. It's not just doing my very best for me, it's doing my very best for Christ, and also for other things that I'm excited about, like World Vision and kids in Africa, and I'm starting to get more and more reasons for why I run and more and more motivation and all that will continue to allow me to do the very best I can.

### *Being in the Moment*

The second theme that emerged was being in the moment. The results indicate that being in the moment involves a full connection with what the athlete is doing at that time; it is a short-term, immediate focus on what is being done at this moment. An athlete who is in the moment is just focusing on what he or she is doing and nothing else. Blauwet discussed her best focus while racing: "I just focus on what's going on around me, and executing my race plan, but also being

responsive to what other people around me are doing.” Deacon described being in the moment during his best races:

I am in the moment. I’m not running the next mile, I’m running this mile. ...I really think that a lot of it is just being in the moment and just being able to race. ... When I’m having a fantastic race I’m not caught up in running to the next mile marker I’m just running where I’m running.

The participants talked about the importance of being in the moment. This focusing technique allows the participants to be connected with what they are doing. Blauwet explained that staying in the moment can be more difficult for longer races:

When I race, focus means being completely present in the moment. This is easy for the 800 meter or the 1500 meter – events that last only a few minutes. For the marathon, sometimes it takes more intention to make sure that at *some* [emphasis included] point your mind doesn’t start to stray to what you are doing later that day, what someone said yesterday, etc. Sometimes this does happen, so then it’s important to discipline yourself into saying ‘hey, Cheri, cut it out, back to the race.’

Deacon commented about his best marathon and being caught in the moment:

I was just so overjoyed with the whole thing and so caught in the moment and I think that if I had to think back about the race, that was one of the things that typified the whole race experience is I was so caught in the moment, there was nothing else in the world that was going on besides from the race I was running.

Lewy- Boulet also described her best focus as being in the moment and “in the zone”:

You're definitely in the moment, in a zone, there is nothing that can really break it. ...I am aware of what is going on around me, and the concentration is hard to break. I feel that when I'm in the zone I don't really pay attention to things outside, it's just a very narrow task. There's a lot of things that might go through my head, but it's the things that I put in my head that matter.

The sub-themes that emerged from being in the moment were executing the race plan, and responding as necessary to the race.

*Executing the race plan.* Several participants discussed the importance of focusing on executing their race plan in order to race their best, and not letting other participants or external events dictate how they are going to run. Stevenson talked about the importance of believing in and focusing on her race plan:

You have to stick to your plan and not worry about what everyone around you is doing. But it's hard the first mile because you're convinced you're doing something wrong if everyone is ahead of you, and it's too early to check your pace because there are no mileage markers in the first few minutes. But you just have to know that you're smarter than they are at that time and trust your pace and stick with your race plan, no matter what the others are doing.

Lewy-Boulet also commented on the importance of executing her race plan, especially in the first couple of miles when things unfolded differently than she expected:

I was not in the group with anyone. I went out and I was up front and my lead was growing and growing, and I actually was running just the pace that I set out to run, so I wasn't being too crazy, but it looked like I was out there doing something insane because the whole group, especially Deena, they were, in that

first mile, 15 seconds behind me. ...And all it took, I looked at my watch and I just got reinforcement from what I was doing, that I was on pace.

However, Sell described that while he typically focuses on his race plan in the early stages of the race, during the latter parts, his focus shifts to responding to other competitors:

You let the competition do what they want for the first half, maybe even 18 miles, up to 18 miles.

Researcher: After this point, does it change?

Sell: Yes, it changes in that you have to start to race, and if the competition is out of sight or far ahead, you need to pick it up and give yourself a chance to place well.

*Responding to the race.* Several participants discussed the importance of being able to respond to what was going on around them and the importance of being flexible in their race plan. Although prior to their race, they outline what they would like to do during the marathon, they are aware that they must be flexible and respond to both what is going on around them during the race, as well as to the specific demands of the race. McInnes explained that, while he has a race plan, he is also ready to improvise during the marathon:

You have to be ready to improvise during the race. You have a race plan, but you know that it's almost never going to go exactly as planned. There's just that internal flexibility in trying to minimize the damage that can occur.

Blauwet said that she responds to the race around her rather than just focusing on executing her race plan:

I think that once I'm out on the course I don't even think about the race plan as a plan per se, I think I just race. And I respond accordingly, and I think that the

race plan becomes almost subconscious. It's there, it's on my mind, it's what I'll do as a default, but I'm more so focused on what other people are doing around me.

Hall explained his approach to the marathon in order to maximize his ability to respond to unexpected events:

Our whole training mantra leading up to London was to 'expect nothing but be ready for everything.' So to go into the race with a really open mind of 'hey, anything can happen,' so you don't think 'this is what is going to happen.'

### *Body Awareness*

The results demonstrate that the participants focus on their bodies and have body awareness. The participants explained that they are very aware of the signals that their bodies are sending them. This awareness involves interpreting their bodies and how they are feeling, and responding accordingly. Wykes commented that he is focusing on "being really in tune to all the signs of fatigue or of feeling good." Body awareness is learned and developed through training and past experience, and Hall explained that it involves monitoring and interpreting all the signals that his body is sending him:

The key to the marathon and to really any race that you do, is finding that razor's edge, or that mountain-top peak where you're right on the line of going too hard, but you're just balancing it. Any harder, you're going to be going too hard and you're going to hit the wall, so you just want to get yourself as close as you can get to it. And it's just interpreting your body, breathing, the effort that your legs are putting out, and just how smooth the pace feels. So you're just looking to

simulate all the work you've done in practice and the feeling that you've gotten, you've developed that sense of body awareness is really important.

One participant discussed the difference in his focus between when he runs at an easy pace as compared to a faster, more challenging pace. Deacon explained the focus differences in how he monitors his body when he is running slower as compared to running faster:

We talked about some of the dissociative thinking [earlier in the interview], running through the woods type thing. That's really not all that focused because there's a lot of free mental time there, which is one of the things that I really like about the sport. But if I'm running hard, then I can't do that. When I get to a certain pace or a certain level of effort then I'm just not able to put thoughts together that way. So then it becomes more focused and much more, I'm thinking about what my body is doing, I'm scanning my body, I'm pushing my body that much harder, I'm playing little mental tricks to try to keep myself from backing off. I'm monitoring how I'm feeling, whether I'm tight or I'm loose, this sort of thing. If I'm in a race, I'm watching where other people are and trying to relax in behind them. That sort of thing, it's very, very, very focused and it's mentally taxing.

The sub-themes within body awareness are pace, form, and relaxation.

*Pace.* Pacing is an extremely important aspect of marathon running. As described within the unique characteristics of the marathon, if an athlete goes out too fast, he or she will be unable to sustain the pace, and as a result may either be unable to continue, or will drastically slow down. Stevenson explained, "Most people run only two marathons a year, so you don't want to throw one of them away by taking a big risk on your pace early in the race." As a result, focusing

on pace is extremely important in order to ensure that the participant doesn't start the marathon too fast. Sell commented that "Splits, per mile pace is probably the number one thing you're focusing on." Stevenson also explained that her pace takes up the majority of her focus during a race:

I look at my watch at kilometre or mile markers for pacing reference as a reminder that I need to stay on track. ...I'm always asked, whenever people find out I'm a marathon runner, they say 'well what do you think about all the time?' It's different day to day, but on race day, I'd say 95 plus percent of the time I'm thinking about pace – am I on it and how do I feel about it? So I just try to bring it down to that.

Wykes explained that his focus is on running at a certain pace. In order to run at that pace, he monitors his body:

Being focused while running is being able to get into a zone where you can run a pace, and you're just telling yourself to keep on that pace, and you're really focused on how your body feels and how your breathing is. And so you're monitoring all these things to go a certain pace.

However, not all participants stated that they are concerned with what their pace is. Some participants tended to be less concerned with pace, and more focused on responding to the pack of competitors around them. Hall explained that he wasn't focusing on running a pace, but that he was making sure that he stuck with the pack: "We [the pack] got after it right from the beginning, our first five k was the fastest five k of the race for me, and it was well under world record pace. We were running ridiculously fast."

Blauwet commented on a unique aspect of wheelchair racing:

I think it [pacing] is also different for us because of us being in a racing wheelchair. When you're working with a draft situation, pace becomes much less important because you're more dictated by the speed of the pack rather than watching what the speed per mile is. Pace becomes important when you're on your own again. ...And it becomes easier that way, and I'm sure runners do it for the same reason, because then you don't let yourself down when you know this is exactly the time, the splits you need to run.

*Form.* Form was talked about by several of the participants as something they focused on throughout the marathon. Focusing on their running form was a technique that was used to monitor and maintain the pace and effort, and to stay relaxed. While form was focused on throughout the race, this focus became much more important as the marathon progressed and the athlete started to experience fatigue. Wykes outlined why it is so important for him to focus on form:

Concentrating on form is definitely something specific to do to maintain your pace and just keep things going. When your form falls apart too much it becomes impossible to maintain the pace, so focusing on that [form] is a way to maintain, just try to stay with the pace and not think too much about how hard it is.

Hall explained, "I think about my form a lot, if I'm staying relaxed, are my arms relaxed, am I bouncing off the ground nicely, getting good return."

Form is especially important in the latter stages of the marathon. Several participants discussed focusing on their form as fatigue began to set in. McInnes explained, "The muscle, I wouldn't even call it pain, it's just sort of slow fatigue, you basically just have to concentrate on staying relaxed and keeping your form." Wykes expanded, saying that he "just focus[es] on my

form, trying to drive and be more efficient in my stride. ...In the later stages of the race I think focusing on my form really helps me get through it. It's running tall and strong." Hall explained that in his best race when he started to fatigue in the latter stages of the marathon, he focused on different aspects of his form:

I started thinking a lot also about my form, trying to use my arms more because my legs weren't really able to go much faster, and just trying to keep my turnover fast. I was thinking a lot about that.

Lewy-Boulet commented about the end of her best race and fighting against slowing down: "My legs started to feel a bit tired, and I just reminded myself about my form, and not to get sloppy with my form, with my stride, and that helped." Focusing on form was a method used to stay on pace, and Hainings added:

One thing I do try to concentrate on is keeping myself on pace with good form, and not to over-compensate. I do find that if my form starts to crumple, I focus on keeping good posture and keeping your stride going as well as you can... I find that as soon as you seize up you slow down. And it's just trying to concentrate on reaching and keeping my feet hitting the ground at a good pace and staying relaxed, and keeping my stride up.

*Physical relaxation.* Running relaxed or feeling relaxed was an important part of focus for the participants, especially in the first part of the marathon. Hall described the importance of focusing on staying relaxed during a marathon:

A big part of running and getting into the right zone is the ability to stay relaxed, and so I'm always constantly telling myself in my training and racing to stay as relaxed as possible and to make it as easy as possible for as long as I possibly can.

Hall also explained that in the early part of the marathon, he was:

Staying as relaxed as possible. So whether it's just staring into the back of someone's shirt, and feeling your face staying relaxed, and just bouncing lightly and maybe stretching out your arms a little bit. Just doing things like that.

Hall added that towards the end of the marathon, he was "trying to stay relaxed while running as hard as I possibly could."

Wykes stated the importance of practicing feeling relaxed in training: "That's definitely something I think about in the lead up. Associating being relaxed with saving energy and feeling good."

However, Stevenson cautioned against feeling too relaxed, and said, "If you feel too relaxed then you know you're not focused or running hard enough."

McInnes discussed how staying relaxed and maintaining running form are connected:

Something that I've worked on in training and racing is a lot of upper body relaxation. Just try to get my shoulders loose all the way to the fingers. ...In the long races you just have to run relaxed and for me it's a combination of carrying my hands high but relaxing my shoulders and carrying them low and keeping a good high cadence. When my shoulders tighten up then my cadence slows down, so for me relaxation is most of the time concentrating on my upper body form.

### *Progressive Intensity of Focus*

The participants' focus evolves over the race, as they respond to the different demands that their bodies are placing on them. The participants discussed that the marathon gradually becomes more difficult as the race progresses; the athletes transition from feeling relaxed in the early stages, to feeling extremely fatigued in the latter stages. The beginning of the marathon is

easier physically, so the participants can have a less intense focus. As the fatigue accumulates and the physical demands become greater, there are also greater focus demands in order to maintain the performance level. The intensity of the focus shifts, becoming progressively more intense as the physical demands of the race increase. McInnes described how the demands of the race change:

There's sort of a turning point, where, in any race, it goes from being very relaxed and comfortable, and usually that's about two-thirds of the way in, and then it becomes less effortless, and you have to concentrate more on avoiding the pressures your body is putting on you to slow down. Because there are all these internal mechanisms driving you to slow down; mentally you have to have all your defences up against slowing down, keeping your form up, keeping relaxed, keeping your mental energy towards keeping the pace effort up, responding to the kilometre splits, and it takes so much more of an effort to respond at that point and you have to have all of your mental capacity with you.

Wykes further clarified the progressive phases of the marathon and how his focus changes through these phases:

The marathon, it's got these phases where you have to focus on holding yourself back a little in the first 15k. And then you start to get fatigued and you really have to focus on being positive and keeping the pace up. And then the last 10k, it's brutal. You really have to be strong mentally, and not to crack and just give up totally.

While the participants recognized the necessity of a more intense focus towards the end of race, they also recognized the importance of having a more relaxed focus at the beginning of

the race. If they were too intensely focused at the beginning of the marathon, they felt like they were wasting energy that would be needed in the latter stages of the marathon when they started to fatigue. Hall explained:

My coach always tells me in the first half of the race you've got to fall asleep, and the real racing doesn't start until you know, half way, or even further, like 20 miles. And even at that, it's little things where you want to manage your emotions and your excitement to where you're gradually getting more and more excited as you go, and it's just a slow build up. You don't want to be in the first 13 miles bouncing along and thinking all these brilliant inspiring things, you've got to keep your energy up because you've still got a long way to go at that point. There's definitely a different thought process that goes on during the first half of the race compared to the second half of the race.

When talking about the start of the race, the participants emphasized that they did not want to be too focused right away, due to the length of the marathon. Although he was focusing on remaining relaxed, Wykes felt that he didn't want to be "too focused" explaining that the race is less demanding in the earlier stages, placing fewer physical demands on the athlete and requiring less effort. During the latter stages of the race, physical fatigue starts to set in, and at that point, the focus is much more important to ensure that performance is maintained. Wykes said:

I don't think you can be extremely focused for two plus hours. Mentally it is just too long of a time to be thinking about everything - staying on a certain pace, reading into how your body feels, racing your competitors, etcetera. There has to be a certain amount of time during the race (at least the first 10 to 15 kilometres)

when you are not constantly and obsessively focused on these factors. Physically, the first 30 to 60 minutes of the marathon shouldn't feel extremely intense, so at the same time you shouldn't have that extreme mental focus during the early stages. If you are extremely focused early on it may take away from your ability to focus later in the race. And later in the race is when you need to be really mentally focused on those things mentioned early such as staying on a certain pace, working on form, listening to your body, racing your competitors, etcetera, and you need that extreme mental focus late in the race because the race becomes progressively harder physically. So, it's almost a case of not wanting to waste energy by being too focused too early, because physically the marathon shouldn't be an event where extreme mental concentration is required early on.

Wykes commented further about eliminating intense thoughts early in the race in order to stay relaxed:

You kind of try to shut off and just hope that time [at the beginning of the race] passes quickly. Just stare at the guy's back, and try not to have these thoughts of 'is this fast enough, am I going too slow, it feels kind of hard, or it feels kind of easy.' Just try not to have any of those thoughts, and just staring at the guy's back and just going.

Researcher: So does eliminating all those thoughts help you to stay relaxed?

Wykes: Yeah, definitely, it helps me to stay relaxed and save energy as well.

When you've got too much going on mentally it can kind of be draining physically. So yeah, it just helped to try and block out all those things, it definitely helps you to try and relax and find a groove that is comfortable.

*Focus before the Marathon*

The results demonstrate that in the time before the marathon, the participants use a variety of techniques to get themselves properly focused for the race, eliminated outside distractions, reviewed their race plan, and took confidence from training. Some participants thought about the race and prepared themselves for what they were about to go through, while others preferred not to think about the race.

*In the Days Before and Marathon Morning*

The participants discussed drawing on confidence in the days leading up to the marathon and on marathon morning. Quinn-Smith explained that it is just a matter of "...having confidence in what you've done so far and just utilizing that throughout the week before and the day of." The participants knew that they had done all the hard work that they needed to do in training, took confidence from that, and had to execute what they had done in training in their race. McInnes said, "I had good confidence from my training that I was at that level of fitness [to achieve his race goals]. ...Basically it was just a matter of preparation and my execution of training to run the race at that level."

*Thinking about it.* Some participants feel that in order to achieve their best focus for an optimal performance in the marathon, they need to think about the race in the lead-up time to the marathon. Sell commented, "As the race draws nearer, I begin to think about it more in training and on a daily basis. The day before [the race], I am just trying to visualize different scenarios and focus on splits during the race." Blauwet explained how she slowly becomes more focused as the race approaches:

I think you've just got to focus on putting yourself there [in "the zone"]. You start within those few days before and you begin to sort of rev it up and filter out all

the little distractions. ... The couple days before the race, even if I was at something else, I would still be thinking about the race and sometimes feel not really present at what I was doing at the time, which is a great sign for the race, but not as much fun for what I was doing that given day.

Some participants focused on what they were going to put themselves through in the race, in order to be ready for the pain and discomfort. Stevenson said in her preparation before her best race she was:

...just trying to stick with the race itself and not the outcome, and I do that a lot. What do I want to achieve in the race? I want to win a gold and I want to run this time. But I've learned I do best now thinking about the in between, the actual pain itself. ...I need to get mentally prepared for the pain and discomfort and energy required on [race day].

Wykes also described that on race morning he was "thinking about the torture I was about to put it [his body] through and what I'm about to go through."

*Not thinking about it.* In direct contrast, several participants discussed not thinking about the marathon in the days leading up to the race and the night before. They felt that all the necessary work and preparation had been done, and there was nothing more that they could accomplish. Sell described:

I was actually trying to not think about the race that much because I'd thought about nothing else for the last four or five months, and I just tried to convince myself that there was nothing that worrying this last night was going to accomplish.

Quinn-Smith explained that she had thought about the race during her training and in the lead-up time to the race, and tried not to think about the marathon the night before the race:

I try not to think too much about it before, just because I don't want to over-think anything. ...I just try not to think about it, because leading up I've thought about it and what I want to do race day.

Additionally, although Wykes felt that he needed to prepare himself for the pain, he did not want to spend too much time thinking about the marathon: "You don't want to think about it [the marathon] too much beforehand as well, because you know it's going to be really painful, so you don't want to stress yourself out with that."

*Race plan.* The participants felt that reviewing their race plan was a very important part of their focus when preparing to race. Blauwet explained that her race plan "was always very, very prominent in my thinking going in, the night before and the morning of."

Executing the race plan emerged from the results as something the participants focused on in order to race their best. The participants knew what their race plan was and that on race day they just had to apply all the training that they had done and execute their race plan. McInnes said, "it's all about executing the race plan on the day of the race." Stevenson explained that in order to focus on executing her race, she would review different aspects of her race plan and her training, saying, "For race focus, I usually think of what times I want to hit, who's in the race, how well my work-outs have been going, etcetera." The participants describe having confidence from training that they could execute their race plan. Lewy-Boulet commented:

At that time [race morning] I knew my preparation went really, really well, and I was confident in the training I had done, and there was really nothing that was going to change. I was just going to go out there and run my race.

Deacon also added that, in the days leading up to the race, having confidence and a positive focus in his training allowed him to focus and prepare for the race:

I had just been so conditioned over the preceding weeks that this [marathon] was going to be a positive experience and that I was ready, and that if I just stuck to my race plan that things were going to go really well.

### *Start Line*

The participants had a variety of focusing techniques that they used on the start line in order to ensure that they would be ready to race when the gun went off. These focusing techniques included visualizing their race and trying to stay calm and relaxed. Several participants commented again about focusing on staying relaxed during the early stages of the race.

*Visualizing.* Focusing on visualizing different aspects of the race was a technique that several participants mentioned using while they were on the start line. McInnes explained that he was “mentally visualizing the splits and reminding myself what kilometre splits I wanted.” Similarly, Blauwet said that her strategy is to “look straight ahead and be visualizing your start and how you want it to go, what your strategy is for that first part of the race.” On the start line, Lewy-Boulet was visualizing her race plan and who she needed to be around in order to be successful: “I thought about...the people that I wanted to be around, people I needed to be around in order to make the [Olympic] team.”

*Capitalizing on the moment.* On the start line, the participants were anticipating the race and were focused on capitalizing on the moment and executing their race because they had been training for such a long time for that marathon. Hall described that on the start line:

There's a lot of thoughts about "I can't believe this is finally here, it's finally happening," and it seems kind of surreal. There's all this build up and all this training that goes into two hours of racing. So definitely a lot of thoughts about capitalizing on the moment.

Similarly, McInnes added, "it's all about executing the race plan on the day of the race."

*Once the Gun goes off: The World of the Race*

Although the participants described a variety of focuses that were used on the start line, once the gun goes off and they were racing, they were all able to switch completely and automatically into focusing on what they were doing; all of the athletes were in the moment.

Blauwet commented, "Once the gun goes off then you enter into the world of the race and everything else goes away. And all that matters is you and what you're doing right then and there." McInnes described the things that he was focusing on once his best race started:

As soon as the gun goes and we start, you're just totally immersed and you don't think about anything else. ...I think 'okay, don't run too fast, find the pacemaker, settle into the group I want, make sure I'm aware of where the first kilometre marker is,' because in a big group you'll be running and you might miss it.

Stevenson explained the different approach to the start of a marathon as compared to a shorter race:

I grew up as a track runner and when the gun goes off on the track you go as fast as you can. But this [running a marathon] is unique and you almost say 'let everyone go by, and I'm just going to hang out back here.' ...A lot of it is control that first bit. That mile is going to feel slower than a jog, but you just have to know that's how it is. That same pace is going to feel really hard in two hours.

The results demonstrate that the participants' focus changes throughout the race in order to constantly monitor and respond to the changing demands of the race. McInnes explained that his focus shifts in order to reassess several different things:

Constantly, just like driving where there's a lot of traffic, you're constantly reassessing what's around you, what you have to think about, and not running too fast. You just have a dashboard in your head, 'what's my effort like, what's my pace like, where's the kilometre marker, who am I running around, what place am I,' etcetera.

#### *Worst focus*

In order to properly understand how focus is regained, first we must explore why focus is initially lost. When participants experienced their worst focus, they allowed themselves to become negative, were focusing on distractions, and were unable to refocus. In order to deal effectively with distractions, the participants had three refocusing techniques: accepting what they could control and could not control; turning negatives into positives; and replacing the distraction with something else. Distractions that the elite marathon runners faced included negative thoughts, pain and fatigue, racing alone, weather, emotions, and situational distractions.

#### *Negative versus Positive*

In worst races, the participants had a negative perspective or negative thoughts, and were unable to become more positive. During her worst races Lewy-Boulet both experienced and had to deal with negative thoughts, and also had difficulties turning those thoughts into more positive ones. She said, "A harder race is where I have to work mentally to replace negative thinking with positive thinking." Lewy-Boulet also mentioned that in her best marathon, she "didn't really

have to replace any negative thoughts with positives because they [negative thoughts] were not there.”

The participants noted that when they had their worst focus, they lost hope and became discouraged. Deacon described his negative focus during his worst race, one in which he was unable to re-focus and become more positive after a series of distractions, and things “spiralled out of control”:

It just kind of went from bad to worse ...where it's like 'oh man this is so lousy, even this is going wrong.' ...instead of thinking positively, I'm thinking, 'holy jumping. Could it get any worse than this?' We go underneath this overpass and the crowds are really thick and it's echoing in there, and instead of thinking 'wow, this is really energizing,' I'm thinking 'oh this is so deafening, can't they just shut up for a while.' It was just one thing after another.

*Losing hope versus encouragement.* Two of the participants also discussed getting down on themselves and becoming discouraged during their worst races. Hall explained, “The biggest barrier to me as a marathoner is encouragement. The moment that I let myself get down on myself and I let myself get discouraged and lose hope, it's the moment that the race is over for me.” Similarly, Blauwet commented that when the race is not going well, “That's when it [her thoughts] gets the worst, when you have nothing to think about besides what could be perceived as your own inadequacies on that day, in a 'the glass is half empty' kind of approach.”

Several of the participants mentioned that the result of a negative focus can be giving up and “throwing in the towel.” Hall commented that, “In the past it's like, 'oh I'm off the pace, I'm going to throw in the towel and jog it in.’” McInnes added:

Sometimes if you're having a really bad one, you're out of it both mentally and physically and you sort of just give up, you throw in the towel. There's been a few times like that where I've just totally stopped, just mentally and physically and just kind of jogged it in, because it's just a terrible day.

### *Allowing Distractions to Take Over*

When the participants had their worst focus, they allowed distractions to take over their thoughts. They replayed an event or incident that had happened earlier in the race, were not focusing on the moment, and were unable to refocus. Deacon described how in his worst race, he allowed distractions to take over, and was not able to regain his best focus:

I'd imagined things being tough because you have to, but I'd never really imagined that kind of a crisis [almost falling twice and actually falling once in the first kilometre of the Olympic marathon]. And I think that I should have had a way to re-gather myself. And it [his race] did spiral out of control from there. ...I was never able to gain control back. It's reasonable that things aren't always going to go your way. You practice your mental techniques and strategies so that when things aren't going your way you can still gather control and re-focus and deal with the distractions. But I was never able to pull myself together for those strategies to work.

One aspect of worst focus that was discussed was the idea that the participant never had a feeling of being in the moment or experiencing momentum during the race. Deacon explained that in his worst race, he was unable to move on from a negative event:

...the difference in the focus [in a bad race, as compared to a good race] is that I'm not focused on, or not necessarily lost in the moment and feeling a sense of momentum. I'm

feeling the sense that the wheels are falling off the wagon, that I'm having a hard time leaving behind the incidents in the last kilometre or mile.

*Unable to Refocus versus Refocusing*

In their worst races, the participants explained that they were unable to refocus after experiencing a distraction. Blauwet explained that in her worst races, instead of focusing on what she can do to improve the race she is in, she loses focus and starts to think about what she wants to change for the next race:

I can sometimes give up on it [the race] and start thinking about the next race.

Which is good, it's good to think about like, project forward and to think about what you want to change for next time, but you shouldn't do that at the expense of doing well in what you're doing at the present moment.

Stevenson talked about how in the week before her worst race, she focused on an outside problem and was unable to refocus on her race:

I let other things going on in my life steal my energy that week. I got to the start line and I knew in the first mile, 'you know what, I've got nothing today.' My coach, he knew what was going on in my personal life, and he was disappointed in me for not being more disciplined the week leading up to the race. ...the week of that race remains a huge regret for me. Because you put in so much work and you're so fit, and you know you're ripped and so unbelievably fit, and then to get there and to be arguing with someone all week, and the day before you're full of tension just thinking about everything except this race which is huge. I don't know if I'll ever forgive myself for that. ... You can't get that day back and I learned a lot that day. I thought, 'you know, if you want to get the most out of

yourself, you have to give up those other problems and focus in on the race, or be disappointed every time.’

Every participant noted the potential impact of distractions and the importance of refocusing during races. In some instances, the participants found that distractions contributed to a worst focus and poor race results. At other times, however, the participants were able to refocus from the distraction and regain their best focus. When participants could not find a way to deal effectively with distractions and refocus, those distractions usually had a negative effect on their performance.

Numerous distractions were listed by the participants that occurred at various points in the race: negative thoughts and self doubt, pain and fatigue, racing alone and “falling off” the pace, worrying about other competitors, weather conditions, situational distractions, and spectators. The participants acknowledged that ineffective distraction control can and often does lead to poor performances. The participants reported having techniques that they use to deal with distractions that arise during their races; however in worst races they were typically unable to apply the techniques. In their worst races, the participants were typically unable to refocus through the distractions to fully regain a positive and effective best focus.

#### *Dealing with Distractions and Refocusing*

The participants have distinct techniques and methods that they use to deal with distractions. Three major themes emerged from the results for dealing with distraction: acknowledging the distraction and accepting that they have no control over that aspect; reworking distractions by turning a negative focus into a positive focus or replacing a negative with a positive focus; and replacing the distraction with something else. Each technique utilized various strategies in order to refocus: focusing on pace, form, and running relaxed; using

confidence from training; acceptance of pain; positive thoughts; sticking to their race plan and executing the race; managing emotions; and using key words and phrases.

*Accepting control and lack of control.* The participants recognized that there are aspects of marathon running that they are unable to control, such as weather and other participants. They reported that when they allowed things that were beyond their control to distract them, they usually lost their best focus and had a subsequent decrease in performance. Wykes discussed the importance of realizing that there are certain things over which he has no control, and by accepting this, he was able to direct his focus away from that distraction:

You do come to terms with [the distraction] like, ‘stop thinking about this so much because there’s nothing you can do about it now. This is just the way it’s going to be and you just have to push on regardless.’ Because you get more discouraged if you think about it too much, so it’s just something that you have to try to push out of your mind and say ‘forget it, there’s no control over it, just focus on running hard.’

*Reworking distractions: Negatives into positive focus.* Reworking distractions was a technique that participants used in order to turn a negative focus into a positive focus, and was mostly used to change the participants’ perspective about the events occurring or events that could potentially occur. Although focusing on aspects of the body, such as pace, form, and running relaxed could make the participants’ focus more positive, the refocusing technique of reworking distractions typically included the use of positive thoughts and recalling confidence from training. Hall explained the importance of reworking distractions:

It’s just a matter taking the discouragement and turning it around into finding a way to encourage yourself. I think that you’ve got to really manage your thoughts while you’re out there [running the marathon], because you have lots of thoughts

and you can't just let yourself go down the path of negativity, you really have to be paying attention and be very mindful of what you're thinking.

*Replacing distractions.* Finally, to help with refocusing, participants reported replacing distractions with measures such as pace, form, and running relaxed. Blauwet talked about working towards the "objective measure" of pace in order to regain her focus. Using "objective measures" replaced the distraction with something else that she had control over and could work towards:

I find that it helps a lot to have objective measures in mind if you do fall off and you end up having to race the race by yourself. If you're by yourself I think it's much more helpful to say "all right, so it's my race now, I fell off the pack, I want to still have a good showing and a good time, so I need to make sure that I keep it above 14 miles per hour. I need to make sure that I keep this pace above x minutes per mile." And that I think is a safe guard, it just gives you a quantity or a goal that is not wishy washy. And when your mind starts to stray into the negative or unfocused thoughts, it's easier to have something objective that you can default or go to that isn't as mentally taxing.

### *Refocusing Strategies*

The participants reported trying to cope with distractions by employing strategies that had contributed to their best focus in the past, including remaining positive, being connected with what they are doing in the moment, and having body awareness. Major components of effective refocusing through distractions were the abilities to become more positive (by using confidence from training), more connected with the moment (by executing their race plan and responding to the race), and having more awareness of their bodies (through measures such as pace, form, and

running relaxed). These strategies placed the participants' focus on things that they can control, which helped them to put the distraction behind them. The participants also emphasized the importance of anticipating and accepting fatigue and pain in order to effectively deal with that distraction. A major strategy that emerged from the results was the use of key phrases in order to refocus.

*Key phrases.* The participants used key words or key phrases as a method to refocus on what they were doing. Participants planned their key words for refocusing before the race, so that they would be prepared for dealing with distractions. The key words for refocusing were used in a variety of situations, from general refocusing on the race, to managing emotions such as excitement, to dealing with fatigue. Blauwet described:

I'll take a little piece of paper and I'll write three or four really brief quotes or mantras on there, and then tape it to my [wheel] chair right where my eyes look down on the frame so that if I find my focus starting to go during a race, I'll look down at that and just have those things repeat through my mind.

Lewy-Boulet explained that she uses her key words in order to deal with fatigue:

I usually have a little pile of words that I have to remind myself, or that someone put in my head, whether it's my coach or someone else, whether it's a saying, or a phrase, or just one word. That [key word or phrase] usually is something that overcomes the fatigue, and it's a big battle.

Deacon commented that using two key phrases in one of his races helped him to manage his emotions throughout the race:

I'm a huge Churchill fan and so I adopted the coaching line of 'this is your finest hour' which is part of Churchill's speech to encourage the British people as they

are getting bombed by the Germans during the Battle of Britain. So I really adopted that one. ...And because I was in Sweden I took the Viking line of return, I wanted to return the conquering hero. A Viking raid kind of thing. So anyway, I used these throughout the race as encouragement and just to calm myself down as much as anything. Not to get too carried away in the early parts of the race. And also just to build up the excitement.

### *Negative Thoughts*

A major distraction that emerged from the results was negative thoughts. These negative thoughts could occur in response to how the race was going, or could emerge in the form of self-doubt. Negative thoughts came much more often when a race was not going how the participant had planned. If the participant dwelled on these negative thoughts, it made performing successfully much more challenging than if they had a positive focus. Sell discussed the importance of being able to refocus through negative thoughts, saying that dwelling on negatives within the race can result in a bad race:

It's [marathon running] a lot like a job. You go to work during the week, and you have bad days and if you just dwell on them and think about them all the time then it's going to be a bad week.

Blauwet explained that she usually experiences negative thoughts when a race is not going how she wants it to, and that these negative thoughts come much less often when a race is going well:

If it's not going as I want or planned, then I think the largest distractions are just negative thoughts of "oh my gosh, this isn't going like I want it to. Oh you messed up. Ohhh, this hurts. Ahhh, this is frustrating, I wish it were done." Versus if it's going well, then I think those much, much, much less.

Hall commented that negative thoughts are not necessarily a bad thing. The problem occurs when these negative thoughts are allowed to take over. Instead of trying to avoid having any negative thoughts, Hall emphasized that what is most important is how he deals with them:

I had negative thoughts when I was out running this last London marathon. I remember thinking like, 'man this pace is crazy, like I don't know if I'm going to be able to make it this long.' I've learned that it's okay to have some of those [negative] thoughts, it's what you do with those thoughts that really makes a difference. Because I don't want to be afraid to have those thoughts, it's more about how do I deal with it. Because I think everyone does at some point, everyone questions but it's just how you deal with it that makes all the difference.

Participants had a variety of methods and techniques to deal with negative thoughts in order to regain their best focus, including focusing on measures such as pace and form, focusing on positive interpretations of the event or thoughts, and focusing on feeling confident.

Hall discussed interpreting potential distractions and events that could be seen as negative in a positive manner. Refocusing on the positive instead of the negative aspects ensured that he stayed focused on what he was doing:

We [the pack] got after it right from the beginning, our first five k was the fastest five k of the race for me, and it was well under world record pace. And we were running ridiculously fast, so when you go out that hard you really have to mentally make sure that you're seeing that as a positive thing rather than a negative thing.

Researcher: So when you did go through like the first five k so quickly, what were you doing to make sure that you were interpreting that as positive?

Hall: I remember after seeing our third mile, it was like 4:26, or 4:25 or something like that, and I remembered one of the videos that I had watched over and over again in high school of Jim Ryun. He's one of my favourite runners that I really looked up to, and he said that his coach always taught him that if he arrived at a certain part in the race faster than he anticipated, not to see that as a negative thing, but to see it as "hey I'm here this much in advance, now I can run even that much faster." So I was thinking of like, "all right, maybe we're going to run a world record today." I just wanted to have a really open mind to what was possible in it.

Stevenson explained that when she starts to experience negative thoughts, she takes confidence from the fact that she has experienced the pain of the marathon before. By drawing on her past experiences with pain, she is able to overcome her negative thoughts, instead refocusing by replacing these thoughts with confidence and acceptance of the physical discomfort:

Especially when the first negative thoughts go through, you just think, 'I've done this before. I've been through this. How bad is it? Is it as bad as that time you ran 2:40? No.' So part of it is accepting that it hurts and just figuring out if it's something to worry about or not. And hopefully it's nothing to worry about, it's just a little test to see if you're ready to take it on.

Lewy-Boulet talked about how negative thoughts can sneak in, and cause her to doubt herself and what she is doing. Instead of allowing those thoughts to distract her, she focuses on positives as well as physical measures, such as her form, that she has control over:

It's overcoming that, 'I don't know if I'm ready for this pace,' thinking, or 'did I make the right choice going out at this pace?' And then you start thinking about, instead of thinking about the great workouts you've done, it's the workouts that were difficult and you maybe didn't finish for some reason. So it's that competition to get that out of my head and to replace that with the good things.

[Researcher] So how do you actually do that, how do you try to get rid of them?

[Lewy-Boulet] Replace them with positive things, to start thinking about all the great things and to start concentrating on all the good things, whether it's your stride or your arms, or keeping your form straight or looking up. Just replacing it with positive things around you.

### *Running Through Fatigue and Pain*

Although fatigue and pain are expected components of marathon racing, several participants discussed the potential distractions that could occur when they started to experience fatigue and pain in their race. The participants know that they will have to deal with fatigue and pain at some point within the marathon, and have prepared several ways to deal with the pain when it does come. Several strategies that the participants use to deal with the fatigue and pain are aspects of their best focus, such as remaining positive and focusing on their form and pace. Sometimes an external focus on other competitors is also used. McInnes explained how he handles fatigue:

The muscle, I wouldn't even call it pain, it's just slow fatigue, you basically just have to concentrate on staying relaxed and keeping your form. With the muscle fatigue you're going back to the strategy of running your good relaxed form, keeping the good effort, so trying to optimize conditions that you're used to.

Stevenson described the pain that typically occurs in the last five kilometres of the race: "...the effort is so much higher, and the pain is consuming all your thoughts. It's not usually an acute pain, one thing in one spot, it's more of an overall exhaustion." In order to deal with the pain, Stevenson said that she focuses on her form and breathing, which helps her to not worry about the fatigue that she is feeling:

I try to focus on little things like, I'm a big heel hitter and at that point I'm probably slapping the ground, so I just think, "okay, try to get up on your toes a little bit." Focus on your form, little things, think about your breathing, take a deep breath in your nose. Anything to try and just get you going and not worry about all the lactate that's going through your body.

Wykes explained that he expects the pain as part of the marathon, and that he takes confidence from his training to help him deal with the pain and remain focused on running his best race. These techniques for dealing with pain were a combination of acknowledging the pain and accepting that there is no control over it, as well as replacing the focus on pain with confidence gained from past experiences and positive thoughts:

I think you just expect it [the pain]. It is a reality of running a marathon that you're going to be in a lot of pain. So I guess in a way you try to embrace it, so to speak, and just realize that it's the reality of it, but that I've trained so hard that I can run through this pain. I can handle it because I've trained hard enough and fast

enough, I can handle the pain. ...From the training and from all that experience, I can tell myself that I'll get through it.

Stevenson said that she knows that she can't control the pain, and that she just has to accept it as a factor of marathon running, and continue to run as well as possible:

One of my famous lines is 'suck it up, buttercup.' This is a marathon, it's tough, and it hurts but you still have to finish. You have a job to do here... the last thing you want is to finish and not feel tired, so you have to accept the pain and know it'll be over soon enough.

Stevenson explained that an external focus on other competitors can sometimes help with dealing with the pain at the end of the marathon:

If there's some men straggling along, then that helps. Any time you have a visual of someone in worse pain than you, take them down. That's a terrible thing to say but it's true [laughing].

Quinn-Smith also acknowledged that running near a female competitor allowed her to refocus when the pain and fatigue started to accumulate, replacing her distraction with motivation:

That [female competitor] helped motivate me, because any time she would get a little bit ahead, I would have something to work for. So when things got tougher, I would say 'okay, she's right there.' ...It would give me a bit of a surge in energy to think 'well, she's there, now I can keep going with it.' So I think that helped. And just trying to settle on anything that's going to keep your mind positive and just work towards the end goal, that's going to get you to the finish and make you feel good about it.

Hall detailed a list of things that he draws upon to work through the pain that he experiences during a marathon:

All the thoughts that I was talking about in the last marathon, whether it's thinking about my wife, thinking about staying relaxed, my form, my effort, thinking about doing my best, visualizing Christ on the cross, all of those things, that's just pain management. I mean that's really what my job is, to manage pain. You get used to it the more you do it, and practice makes perfect.

### *Racing Alone*

The results demonstrate that the participants were distracted when they fell off the pace (either starting to run slower than the pack that they were running with, or going slower than they wanted to run), and as a result, sometimes struggled to remain focused on what they were doing. Blauwet talked at length about the difference in her focus when she races in the lead group as compared to when she falls off the pace and is racing on her own, saying that it is much more difficult for her to stay positive when she has fallen behind the lead pack:

It's more challenging when you're in third versus first to maintain the focus and the positive energy. ...when it's not going well and you fell off the back and that's not what you had wanted for the race, then it's of course more challenging to keep things in a positive vibe. ...If it's going well and I'm in the lead or with a group of women that are in the lead, then I don't get very distracted. I think the only time that I get really distracted is when I've fallen off the pack and I'm by myself in the back. And then everything is distracting because then it's hard to stay focused. ...If I fall off the pack I tend to get very unfocused very quickly because I tend to give up too quickly versus the much more useful skill, of course,

if you fall off [the pack] to continue to keep going and focus on ‘well I still need to make this my race and push the pace that I want to push.’ But I think it’s very easy once you fall off the back to just give up.

Blauwet explained that when she is racing on her own, she not only relies more on objective measures, but also relies more on the external motivation from the crowd in order to refocus. This refocusing strategy allows her to continue pushing herself to have a good race, replacing the negative distraction with positive motivation:

I do notice that like if a race is not going as I want, then I tend to fall back more on the motivation of the crowd and what’s happening around me. When it’s going well, I feel like there could be no spectators and I wouldn’t really care, or I guess it’s often that I don’t need it, where as if things aren’t going as well then I tend to get more pleasure or more benefit out of people cheering specifically for me on the course.

Lewy-Boulet described getting passed after leading the Olympic trials for 22 miles. Instead of letting that become a negative situation, she decided to use it to her advantage and turn it into a positive, allowing herself to run faster than she had been running on her own:

Instead of saying ‘oh, I’m getting passed,’ I was like, ‘well maybe I can sit behind her and she’ll take me through a faster mile.’ And it worked. And I looked at my watch and I was like ‘wow, okay, I just ran 10 seconds faster that the last mile I ran by myself.’

### *Weather*

One aspect of marathon racing that is uncontrollable is the weather. Participants noted that it could be very distracting if they dwelled on it as a negative. Hall described the

transformation in the weather during one of his marathons, from being a relatively windless, nice day, to strong winds and rain. He then explained how his focus changed in response to the weather, from negative and then back to positive with the realization that he could still run his best despite the weather:

I remember at first when it [the rain] was coming down, being kind of frustrated.

We were running so fast at that point and the pace really dropped off when we hit that rain and wind. I remember being frustrated, ‘man, we were really rolling, we could have run really fast, and now it’s turning into a slow, tactical race.’ But I shook off that feeling after a little bit and I was like, ‘all right, well I just have to figure out how I can be my best and how I can take a shot at winning the race.’

But I had to deal with that emotion in the middle of it. ...I just told myself ‘all right, well don’t worry about it, there’s nothing you can do about it, and it would still be really exciting to win the race and finish really high up.’ And just going back to that same old thought of ‘do your very best.’

Wykes described that the wind was a major distraction during one of his races: “In this marathon, I was definitely distracted by the wind, it was the main thing that was on my mind.” In order to refocus from the negative thoughts resulting from the wind, Wykes focused on his form, and broke the race down into more manageable pieces, saying he was:

...just trying to stay motivated, I tried to tell myself just to concentrate and not to think too far ahead, just to concentrate on really pumping my arms, moving my legs, and trying to get into a good rhythm, not trying to fight the wind too much, and just keep going. I just tried to block out those thoughts and just take it one step at a time, really. And just not try to think too far ahead, and not look at my

splits because I would get discouraged from my splits. Just try to focus on putting one foot in front of the other, really.

### *Emotions*

Participants described that emotions can be a distraction throughout the race, regardless of whether they are a positive or negative emotion. Instead of allowing her emotions to distract her, Lewy-Boulet reminded herself to refocus on the moment and what she is doing:

...you always have to keep reminding yourself throughout the race to get back on track. As great as some of the thinking is that comes to my mind, emotionally I always try to get back to 'okay, concentrate on what you're doing.' Even if you're really, really happy it could be a distraction. If you're not happy, that could be a distraction.

Blauwet described how she deals with her nerves and emotions in the days leading up to the race, channelling them into positive energy as opposed to negative energy:

I think the art is in channelling that nervousness into excitement and energy rather than letting it settle into anxiety. For the few days prior to the race you need to stay calm, confident, relaxed. Then, as you start to get nervous about the race, the key is maintaining that nervousness in a *positive* (emphasis included) and *confident* (emphasis included) manner rather than letting it spiral into self-doubt and anxiety.

Lewy-Boulet elaborated on her pre-race nerves saying she does breathing exercises to deal with the nerves and to help her relax:

I always get butterflies in my stomach no matter how small or how big the race is.

I just breathe through it to calm my mind and to relax myself.

Researcher: And so those breathing exercises, they're just something you do on your own?

Lewy-Boulet: Yeah, on my own. I've found over the years that it relaxes me, gets my heart rate down, and just calms me down.

### *Situational Distractions*

Several of the participants described distractions that were unique to the race that they had to deal with. Deacon explained that he is able to deal with some situational distractions by managing his emotions, remaining calm and relaxed, and not focusing on the distraction:

There's situational distractions too, like you go to get your water bottle and you can't get it, or you knocked it over or some guy keeps clipping your heels or you keep clipping somebody else's heels, or somebody snarls at you, or those sort of things. ...But generally, provided you're not too hot headed and you can just kind of calm yourself and gather yourself, those aren't that bad.

Hall explained one incident in which he missed his water bottle, and had to refocus through that distraction:

One thing that was kind of frustrating was I missed my bottle at 35k. Because all the guys had just made their break, and I was following them, and all of them missed their bottles as well. And that bottle is a really important one, because you're still five miles from the finish line and you're starting to really feel the effects of dehydration and fatigue, and getting in that water is really important. So I remember being really frustrated about that momentarily, but then I just let it go

back to ‘well I’ve got to totally forget that that ever happened and push on and keep running hard.’

Hainings described taking the lead in a race in order to run the pace that she had trained for. Instead of worrying about leading the race and having TV cameras in her face, which was a new situation for her, she focused on her form and on the pace that she wanted to run:

It was quite a shock to be leading the London Marathon for almost three miles. And the TV cameras were right on me, which they had never done before, and I just had to think ‘right, just focus on watching your watch and keeping your form going, and don’t worry about the fact that there’s a TV camera almost up your right nostril.’ And that worked.

#### *Minimizing Distractions Ahead of Time*

Although most of the distractions discussed by the participants occurred during the race, distraction control prior to training and competing was also mentioned. Blauwet explained that reducing distractions prior to her race allows her to stay focused:

Some of the ways I reduce distractions: don’t check my email at all, don’t answer my phone on my way to training on a regular basis, and on race day I leave it [her cell phone] off in the morning of the race – even though most of the messages will be ‘go Cheri!’ and ‘go get ’em!’ from friends and family – it’s still a distraction.

Deacon examined the race course in advance, and knew that it was going to be a three loop route that went by the athletes’ village where he and the other runners were staying. He recognized that this could be a potential distraction to drop out when he was feeling tired and prepared himself for it. Instead of seeing that as a negative, he turned it into a positive for himself:

It was a three lap race so when we looked at the course, everything was seen through a positive lens. It [the race course] went right by the athletes' village. So that means that as the race goes on and people started to feel tired, it's going to be this constant pull to drop out because they know that they can just scoot over to the athletes' village and gather their thoughts and console themselves. It was a hot day and so I knew that this was going to play to my advantage and I knew that the three laps was going to play to my advantage because I knew that when I went by the athletes' village I wasn't going to get pulled away by that but that I was going to benefit from other guys feeling that this was something that they would be tempted to do.

Finally, Deacon explained the importance of planning for distractions in advance so that he can deal with them when they occur: "I think I needed to have a couple of strategies worked out in advance, 'okay, if you're not feeling like you're in the flow, you're going to do A, B, C, and D.'"

## CHAPTER 5

## Discussion and Conclusion

The purpose of this study was to examine what elite marathon runners focus on during competition, what they experience when they lose their focus, and how they regain their focus when it is lost. It was hoped that through interviews with elite marathon runners, a clearer picture of their best focusing techniques would emerge. The results from the study led to a better understanding of the essential elements of elite marathon runners' best focus, how this focus is achieved, aspects of worst focus, major distractions that are experienced, and refocusing techniques to deal effectively with these distractions.

The current study demonstrates that four essential elements contribute to a best focus for elite marathon runners: being positive, being in the moment, having body awareness, and employing a progressively increasing intensity of focus. In contrast, a worst focus occurred when elite marathon runners did not effectively deal with distractions and were unable to refocus on the essential elements that contributed to best focus. Although a number of distractions were noted in the current study, including racing alone, weather, emotions, and situational distractions, elite marathon runners talked about negative thoughts, and pain and fatigue in the most detail. In order to deal effectively with distractions, the elite marathon runners in the current study used three refocusing techniques: accepting what was within their control and what was outside of their control, turning negatives into positives, and replacing the distraction with something else.

*Focus*

Although past literature has examined the importance of focus for optimal performance (Grand-Maison, 2005; Kabush & Orlick, 2001; Kress & Statler, 2007; Nideffer and Sagal, 2006; Orlick & Partington, 1988; Werner, 2003) there is a need to more fully understand what athletes

are specifically focusing on during best performances. The current study attempted to fill this gap by examining what elite marathon runners are focusing on during their best performances. When elite marathon runners maintained a positive focus that connected them with what they were doing in the moment and to their bodies, they were able to have successful performances. Distractions interfered with one or more of the elements of best focus, and if the distraction was not dealt with effectively, a decrease in performance would typically occur.

While past research has discussed association and dissociation extensively (Heffner, 2006; Masters & Lambert, 1988; Masters & Ogles, 1998a; Masters et al., 1993; Morgan & Pollock, 1977; Schomer, 1986; Silva & Applebaum, 1989; Tammen, 1996), the current study suggests that attending to internal or external cues is only part of the focus that elite marathon runners use during best performances. In addition to monitoring and being aware of their bodies, the elite marathon runners in this study were also positive and connected with what they were doing in the moment. They focused in ways that allowed them to adapt to the demands of the marathon, and their focus became progressively more intense over the duration of the race.

### *Positive*

The results from this study show that an essential aspect of best focus for elite marathon runners is a positive perspective. Past research has shown that being positive is an aspect that contributes to optimal performance (Beaudoin et al., 1998; Gould et al., 1992a, 1992b; Kabush & Orlick, 2001; Orlick & Partington, 1988). By maintaining a positive perspective, the elite marathon runners were able to perceive the experience in a constructive manner as well as manage their thoughts. This allowed them to approach and respond to the race with a perspective that allowed them to have a best performance. Confidence from training was used to achieve and maintain a positive perspective, both in the lead-up time before the race and during the race.

Participants emphasized the importance of remaining positive and focusing on positive aspects in order to properly execute the race and perform their best.

Participants in the current study used visualization in the time before the marathon in order to prepare for the race. Murphy and Jowdy (1992) discussed visualization and how it is used for a number of reasons, including increasing self-awareness, increasing self-confidence, and enhancing preparation strategies. The results from the current study suggest that the use of visualization in the time before the marathon enabled the athletes to focus more effectively. The use of visualization assisted the athletes with preparing for and executing the race in a successful manner. The participants in the current study reviewed the marathon in their mind before actually doing it, which allowed them to focus on relevant and task-related cues (Weinberg & Gould, 2003). The use of visualization also enabled the participants in the current study to achieve a more positive and confident perspective, and they would see themselves being successful in the race.

The results from the current study show that participants used the lead-up time to the race to prepare themselves to achieve a best focus on race day. Individual differences existed in preparation strategies, as some elite marathon runners wanted to think about the race in the days before, while others felt that they had thought about the marathon enough during their training and that thinking about the race too much would cause them to worry or get nervous. Research by Nideffer (1981) and Taylor (1995) has demonstrated that individual differences exist in the application of focus before a competition, as some athletes need to think about the event, while others need to keep their mind off the competition until just before the event starts. The findings of Nideffer, and Taylor, as well as those from the current study, suggest that the process of attaining best focus before an event is based on the individual.

*In the Moment*

Results from the current study show that elite marathon runners focused on what they were doing in the moment during their best marathon races. This is supported by previous research that has suggested that when an athlete is connected with what he or she is doing, it results in optimal performance (Gould et al., 1992b; Orlick & Partington, 1988). The participants in the current study utilized specific cues and reminders to help them focus on what they were doing at the moment in order to remain connected with their performance. Kabush and Orlick (2001) found that elite mountain bike racers continually switched from an internal to an external focus throughout the race in order to monitor what was going on around them, as well as to maintain a connection with their bodies. For participants in the current study, being in the moment consisted of executing their race plan, while being able to respond to the race. The current study demonstrates that elite marathon runners must be able to monitor relevant internal and external stimuli, which is done through focusing on executing their race plan as well as having the flexibility to respond to the race and the conditions they are experiencing around them. These aspects of being in the moment contributed to having a best performance. Stevinson and Biddle (1999) proposed a two-dimensional model of attentional focus, which included the relevancy and direction of thoughts. According to their model, executing the race plan would be a task-relevant internal focus, while being able to respond to the race would be using a task-relevant external focus.

*Body Awareness*

The participants in the current study focused on their bodies and were aware of the signals that they were receiving, which allowed them to properly monitor their bodies and pace, and respond accordingly. Grand-Maison (2005) found that elite Ironman triathletes focused their

attention on their physical movements and continued to assess and make adjustments based on the feedback they received from their bodies. The results of the current study demonstrate that body awareness is learned through training and past experiences, which allows the athletes to develop this awareness and practice interpreting and responding effectively to the signals that they are receiving from their bodies.

The elite marathon runners in the current study described a link between running relaxed and having proper running form. This appeared to unfold in a cyclical relationship, in that the participants would focus on their form in order to run relaxed, and would also focus on running relaxed so that they maintained an efficient running form. Participants also focused on proper form or on running relaxed in order to maintain the pace at which they wanted to run. These findings suggest that not only is body awareness an important focus for a successful marathon performance, but also that in the marathon, running form, pace, and running relaxed are all closely linked. Focusing on one physical aspect has the potential to help improve another physical aspect. Future research could examine the relationship between these three aspects in more detail in order to further explore the current study's findings.

#### *Progressive Intensity of Focus*

The current study suggests that elite marathon runners experience a shift in the intensity of their focus during the marathon, moving from a more relaxed focus in the early stages to a more intense focus in the latter stages. The progressive increase in the intensity of focus during a marathon is in response to the increasing physical and mental demands of the situation as the race progresses. Weinberg and Gould (2003) suggested that it is very energy consuming to maintain an intense focus over an extended period of time, which is supported by the results from the current study. Preparing for and anticipating the increasing demands of the race allowed

the elite marathon runners to progressively increase the intensity of their focus in order to respond to the accumulation of fatigue in their bodies in the latter stages of the race. While the relaxed focus changed, becoming more intense over the course of the race, the three other essential elements of best focus (being positive, being in the moment, and having body awareness) remained the same throughout the marathon.

The results from the current study demonstrate that the participants anticipated and prepared themselves for the changing demands of the race, as they both expected and wanted their focus to be less intense in the early stages of the marathon. As the race progressed, their focus became increasingly more intense in order to effectively respond to the heightened demands of the race. Kress and Statler (2007) examined elite cyclists, and found that their attentional focus changed as the situational demands changed. However, their study did not mention a progressive increase in the intensity of focus, which suggests that this aspect may be a unique characteristic of best focus for elite marathon runners. This should be explored further in future research.

#### *Worst Focus*

Worst focus occurred when distractions took the athlete's focus away from the controllable steps that can lead to best performance, as was also demonstrated by Orlick & Partington (1988). During a worst focus, elite marathon runners were unable to effectively deal with distractions, had negative thoughts, and could not refocus. Similar to the findings of Gould et al. (1992b), instead of using task-focused and relevant cues, during a worst focus elite marathon runners in the current study had task-irrelevant and negative thoughts and were unable to focus on what they were doing in the moment. Instead of refocusing, the participants

continued to dwell on distractions, which took their focus away from what they were doing and put it on something that had happened in the past that they could not control at that moment.

Hall made an excellent point during the interviews of the current study when he stated that “it’s okay to have some of those [negative] thoughts, it’s what you do with those thoughts that really makes a difference. Because I don’t want to be afraid to have those thoughts, it’s more about how do I deal with it.” Although Hall was referring to negative thoughts when he made this statement, this statement has relevance for all distractions. Distractions themselves are not necessarily harmful to performance; it is how one deals with the distractions that can have the most significant influence on performance. If distractions can be dealt with constructively, the athlete can continue to perform in a way that can lead to success. Orlick (2008) maintains that both perspective and focus will determine how successfully one is able to deal with challenges and distractions. Both Orlick and the results from the current study show that perceiving a distraction as negative can also negatively influence the focus on the task. This disrupted focus can decrease performance, therefore demonstrating the importance of being able to refocus through distractions.

### *Refocusing*

This study demonstrates that maintaining a best focus in endurance events is very closely linked to the ability to draw upon effective refocusing techniques when a distraction occurs. All elite marathon runners in the current study used refocusing techniques in order to regain the aspects of their best focus that had been disturbed by the distraction. Refocusing techniques allowed the elite marathon runners to accept what they could control and could not control (which was vital to remaining in the moment as opposed to worrying about something that they could do nothing about), to turn negatives into positives (in order to regain a positive focus), and

to replace the distraction with something else (allowing participants to regain body awareness through task-relevant cues, such as pace, form, and running relaxed). These refocusing techniques were not mutually exclusive and were often used in combination. Each technique could be used to address a number of distractions.

In order to refocus, the participant would have to initially determine whether or not they had control over the distraction that they were facing. If they did not, participants would typically release that distraction, and instead focus on what they could control, such as their bodies, or replace negative thoughts related to the distraction with positive thoughts that connected them to the moment. If the participants did have control over the distraction, a process would be taken in order to turn negatives into positives, and replace the distraction with other things, such task-relevant cues (including pace, form, or running relaxed) that would connect them with the moment.

Negative thoughts tended to occur more often when the race was not going how the athlete had wanted it to than when the race was going according to plan. If an elite marathon runner focused on negative thoughts instead of dealing with them constructively, he or she typically showed a decrease in performance. This decreased level of performance could, in turn, result in additional negative thoughts. Research by Dale (2000) found that elite decathletes had a number of coping strategies (including visualization and competing only against self) to deal with several distractions (such as a bad event, fear, and other competitors), which was supported by the current study. Elite marathon runners had a number of strategies that they used to deal with negative thoughts, which allowed them to focus on the task and connect with the moment. Both positive thoughts and task-relevant cues (such as pace, form, and running relaxed) were

used to replace the negative thoughts. Focusing on task-relevant cues allowed the participants to connect with both the moment and their bodies, which helped them to regain a positive focus.

While the results demonstrate that the participants did not typically want to focus on the pain and fatigue that they were experiencing, their focus did not shift completely from their bodies. Instead, the elite marathon runners would focus on aspects of their bodies such as pace, form, and running relaxed, as opposed to the pain and fatigue. In addition to using body awareness to deal with pain and fatigue, other elements of best focus, such as remaining positive and being in the moment, were utilized. Silva and Applebaum (1989) suggested that dissociation was used to deal with pain; however the results from the current study demonstrate that the participants focused on internal aspects such as form, pace, and feeling relaxed to deal with pain and fatigue.

The elite marathon runners in the current study also remained positive and used the confidence gained from training in order to deal with the pain and fatigue that they were experiencing. Previous literature has suggested that instead of focusing on fatigue or pain, athletes should attend to task-relevant cues, which allow them to focus on what they are doing in the moment rather than on how they are feeling (Kress & Statler, 2007; Williams & Harris, 2006). By focusing on their bodies and the task-relevant aspects of performance, and by staying positive and being confident in their training, the elite marathon runners in the current study were able to remain connected with their performance while continuing to monitor their bodies without the potential distraction of fatigue and pain.

In a systematic review of coping literature, Nicholls and Polman (2007) demonstrated that coping changes across different phases of competition. The results of the current study show that a number of techniques were used to deal with distractions and to facilitate refocusing. As

previously discussed, the current study identified that the intensity of focus during the marathon shifted from being more relaxed in the beginning of the marathon to more intense in the latter stages of the race. The shifts in intensity were in response to changes in demands that were being placed on the participants by their bodies and the race. As such, a progressively increasing intensity of focus could be viewed not only as a characteristic of best focus for the elite marathon runners in the current study, but also as a coping mechanism. Future research should examine a possible relationship between shifts in focus as a coping mechanism in more detail.

### Limitations and Future Directions

A constructivist epistemology was used to guide this study, giving each individual the opportunity to describe his or her own unique experiences. As a result, the findings from this study cannot be generalized to all marathon runners or even to all elite marathon runners. However, the research provides interesting insight into the best focus and refocusing techniques that are used by elite marathon runners, which should generate further research in order to develop a deeper understanding of focus and refocusing, and the process of learning, developing, applying and maintaining focus and refocusing strategies.

Retrospective interviews were used in order to obtain data, which is a limitation of the current study. The participants' interviews were based on their recollection of their past marathon races, and therefore, the validity of the study is based on the accuracy and clarity of the participants' recollections. Due to the time gap between the competition and the interview, ranging from a few weeks to thirteen years, it is possible that details were not entirely accurate or complete. However, Lincoln and Guba (1985) argue that retrospective designs are a legitimate method for collecting data, despite the limitations. Research by Gould (2003) and Orlick and

Partington (1988) has demonstrated that athletes are able to provide extremely detailed accounts of past performances, even when years have passed since the event.

A further limitation of the study was that all the participants were Anglophone Caucasians. In the past several decades, marathon running has been dominated by African athletes, and their inclusion would have strengthened and broadened the perspective of the results. However, due to time and logistical constraints, African participants were not included. Future studies should include these athletes in order to not only continue to explore the focusing and refocusing strategies used by elite marathon runners, but also to determine if cultural differences exist.

The current study clearly demonstrates the importance of dealing with distractions and refocusing in a positive manner. This finding is supported by previous research (Smith, 1986), which suggested that ineffective coping can not only lead to decreased performance but also to withdrawal from sport. Effective coping skills are important not only within a competition, but also in sport as a whole, as well as for maintaining optimal performance in many disciplines. Future research could examine the similarity of coping responses within a sporting arena as compared to the coping techniques used in other areas of performance within an individual's life. Gally and Vealey (2008) illustrated that sport psychology is moving towards encompassing an overall view of excellence, as compared to a performance-centered view of excellence. As the field moves in the direction of overall excellence, the importance of effective coping, not only in sport, but in all areas of life may be studied in more detail. Research in this area will be needed in order to explore relationships between managing adversity not only as an athlete but also as a person (Gally & Vealey).

Although the current study demonstrates that elite marathon runners use their training to practice an effective focus, learning from experiences in training was not specifically examined. Future research could look at the process of learning to focus, and how endurance athletes learn from their experiences in training when competition opportunities are limited. An increased understanding of this process could lead to the development of more effective ways to teach athletes to focus for an endurance performance. Optimal performance can potentially be reached on a more consistent basis discovering better ways to train and develop best performance focus. In addition, an intervention study could be designed to implement a focus-enhancement training program for endurance athletes in order to teach athletes effective focusing techniques. The elements of focus that emerged from this study could provide a framework for assisting endurance athletes in improving the quality of their focus and their performance.

By better understanding the factors that contribute to worst focus, steps can be taken to deal with these distractions and to overcome or avoid them in future performances. The current study demonstrates the importance of preparing for distractions such as fatigue. Through the identification of this and other distractions, athletes can properly prepare themselves to deal with these distractions in future marathons. An intervention study that teaches refocusing techniques to endurance athletes would be a valuable next step for applied research in this field. The refocusing strategies that emerged from this study could be of value in assisting endurance athletes in dealing more effectively with distractions, allowing them to refocus on the task-relevant cues that will lead to a successful performance.

### Conclusion

The marathon runners that participated in this study talked not only about their best focus and related aspects of the marathon, but several also discussed the importance of keeping

running and marathon races in perspective within their life. This is a lesson that has been repeated several times for me, especially over the past two years. I have learned that continually striving to find, achieve, and maintain balance in my life is extremely important in order to ensure that I am functioning in a positive and effective manner. There are a number of passions in my life, all very important in their own regard, that have helped me to maintain balance and perspective during the process of completing my masters degree.

Over the past two years, this thesis has become my own personal marathon. During this time, I have learned my best and worst focus, have had distractions, and have learned how to effectively deal with those distractions and refocus on the task at hand. I have yet to run a marathon, but I feel that when the time comes, I will have a distinct advantage due to what I have learned about focus and the marathon through this research. The knowledge that I have gained has been invaluable, not only in regards to focusing strategies, but also in terms of the academic process, and ultimately about myself. I am thankful for all the opportunities that I have experienced, for everything that I have learned and for everyone that I have learned from during this process. I am humbly grateful to all the participants, who not only gave their time, but also shared their stories and a piece of their own passion, which ultimately helped to fuel and develop my own passions. Their words and stories have shaped a large part of my life over the past two years.

Finally, I would like to end with one of my favourite quotations from the interviews. The quotation was originally in regards to the shifting intensity of focus, and the fact that the first part of the marathon is much more relaxed. However, I think it is a relevant and fitting summary to the marathon, the process of my Master's degree, and the experiences that I have had. As Matt McInnes so eloquently put it, "That's the whole beauty of it."

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## Appendix A

*Information Letter*

Dear Participant,

As part of my M.A. thesis, I will be conducting a study under the supervision of Dr. Terry Orlick, a professor at the University of Ottawa who also works as a sport psychology consultant. The purpose of this study is to examine the focusing skills utilized by elite marathon runners, more specifically to discover what these athletes are thinking, feeling or focused on before and during their best performances, and what they do mentally to regain their focus if it is lost during a race.

I feel that having you as a participant would contribute greatly to this study as your success as a competitive marathon runner is widely recognized and respected. Your competitive running thoughts and experiences are highly relevant to the study and can provide important information.

If you are interested, you will be asked to participate in the following:

- A one-on-one face-to-face interview, lasting approximately 60 minutes.
- Potentially one or two follow up interviews (via phone or email), lasting between 15-30 minutes
- Read your interview transcript to verify the information you provided is accurate and make changes, corrections, or clarifications if necessary

Interviews will be audio taped and then transcribed, and transcripts and audiotapes will be stored in a locked filing cabinet in Dr. Orlick's office for a period of five years after publication of the findings. If you choose to participate, the information that you share may be used for the purposes of publication in scientific journals. You may be quoted in presentations or publications provided you give your consent, but your anonymity is guaranteed. Anonymity will be assured by the use of pseudonyms and the alteration of minor identifying details in the publishing of findings. However, you will have the option to refuse a pseudonym, which would allow your name to be associated with your responses. You will receive, by providing a mailing address below, a copy of your interview narratives for verification. As a participant, you must be able to read and speak English as each interview will be conducted in English only. There will be no compensation for your participation in this study.

There are very minimal risks involved in this study. A potential risk from this study could be discomfort when discussing some of your running experiences. You are free to discuss only as much as you are comfortable with. You are free to withdraw from this study at any point without any repercussion.

your time and consideration.

Best wishes,

Lisa Benz, BKin., M.A. candidate  
School of Human Kinetics  
Faculty of Health Sciences

For additional questions, please contact myself or:  
Dr. Terry Orlick  
School of Human Kinetics  
Faculty of Health Sciences  
University of Ottawa

*Consent Form***Mental Focus Used By Elite Marathon Runners**

Lisa Benz, BKin., M.A. candidate  
 School of Human Kinetics  
 Faculty of Health Sciences  
 University of Ottawa

Terry Orlick, Ph.D., Supervisor  
 School of Human Kinetics  
 Faculty of Health Sciences  
 University of Ottawa

I, \_\_\_\_\_ have been invited to participate in the research study being conducted by Lisa Benz of the Faculty of Human Kinetics at the University of Ottawa. I am aware that this study is part of the requirement to complete a Master's thesis. The project is being supervised by Dr. Terry Orlick of the Faculty of Human Kinetics at the University of Ottawa. The purpose of this study is to examine the focusing skills utilized by elite marathon runners, more specifically to discover what these athletes are thinking, feeling or focused on before and during their best performances, and what they do mentally to regain their focus if it is lost during a race.

My participation in this study will consist of one, one-on-one, face-to-face interview lasting approximately 60 minutes, unless I decide to extend it. In this interview, I will discuss the focusing techniques that I use when racing a marathon. I am aware that I may be asked to take part in a follow-up interview, lasting 15-30 minutes, to clarify some points that were discussed in the first interview, which I am free to do or not do. Interviews will be audio recorded. I understand that the contents of the interview will be used for the advancement of knowledge about elite marathon runners' focusing strategies and that my confidentiality will be respected by omitting any information that may identify me as a participant in this research.

My participation in this study will center on discussing personal racing strategies and experiences that I feel comfortable sharing. Information I share will be related to psychological strategies used during racing and may therefore cause psychological discomfort. However, I understand that I am free to control the extent to which any issue is discussed. The researchers have reassured me that every effort will be made to ensure that this interview is a positive and meaningful learning experience. I am free to withdraw from the project at any time, before or during an interview, and can refuse to answer any questions without worry or prejudice.

My participation in this study will be used to enhance the knowledge of how focusing skills can be used to improve performance in running and related endurance pursuits. I understand that I will not receive compensation for participating in this study.

I have received assurance from the researchers that the information I will share will remain strictly confidential (unless as an elite high performance athlete I prefer, choose and inform the researcher that I want and prefer to have my name associated with my comments). The researcher and her supervisor will be the only ones with access to the data. The data will be stored on campus at the University of Ottawa, in a locked filing cabinet in Terry Orlick's office. Anonymity will be assured by the use of pseudonyms and the alteration of minor context details in the publishing of findings. Tape recordings of interviews and other data will be kept in a secure manner and will be destroyed five years after publication of the findings. I understand that I have the option to request that pseudonyms not be used, in which case my name would be associated with my responses.

I am under no obligation to participate, and if I choose to participate, I can withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences.

I, \_\_\_\_\_ agree to participate in the above research study conducted by Lisa Benz of the Faculty of Human Kinetics at the University of Ottawa, which research is under the supervision of Dr. Terry Orlick of the Faculty of Human Kinetics at the University of Ottawa.

If I have any questions about the study, I may contact the researcher or her supervisor.

This research has been approved by the University of Ottawa Health Sciences and Sciences Research Ethics Board. Any information requests or complaints about the ethical conduct of the project may be addressed to the Research Ethics Board for research involving human participants of the University of Ottawa, or the Protocol Officer for Ethics in Research: Protocol officer for ethics in research, 550 Cumberland, Room 159, University of Ottawa, Ontario K1N 6N5, (613) 562-5841, [ethics@uottawa.ca](mailto:ethics@uottawa.ca)

I understand that two copies of this consent form are necessary, one for me to keep, and the other I understand I must sign and return to the researcher. I understand that the researchers below are available to answer pertinent questions.

I certify that I am 18 years of age or older.

I understand that the interviews will be audio-recorded.

Participant's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Witness (*needed in the case where a participant is illiterate, blind, etc.*): \_\_\_\_\_  
(Signature) Date: (Date) \_\_\_\_\_

Researcher's signature: \_\_\_\_\_ Date: \_\_\_\_\_

I understand that to ensure that all my thoughts and comments are accurately captured the researcher will audiotape the interview.

I, \_\_\_\_\_ agree to being audio taped. \_\_\_\_\_ Yes \_\_\_\_\_ No

I, \_\_\_\_\_ agree that my quotes can be used in the results. \_\_\_\_\_ Yes  
\_\_\_\_\_ No

I, \_\_\_\_\_ wish to be assigned a pseudonym in the results.

OR

I, \_\_\_\_\_ wish to have my real name used in the results.

## Appendix C

Table 1

## Athlete Profiles

| Participant                | Country       | Personal best<br>marathon time and date     | Number of<br>marathons <sup>1</sup> |
|----------------------------|---------------|---|-------------------------------------|
| Cheri Blauwet <sup>2</sup> | United States | 1:39:53, Boston 2004                        | Seventeen                           |
| Bruce Deacon               | Canada        | 2:13:35, London 1994                        | Guessed between<br>30-40            |
| Hayley Hainings            | Great Britain | 2:29:18, London 2008                        | Six                                 |
| Ryan Hall                  | United States | 2:06:17, London 2008                        | Three                               |
| Magdalena Lewy-Boulet      | United States | 2:30:19, US Olympic<br>Marathon trails 2008 | At least 10                         |
| Matt McInnes               | Canada        | 2:16:59, Ottawa, 2008                       | Six                                 |
| Tara Quinn-Smith           | Canada        | 2:33:58, Ottawa, 2008                       | One                                 |
| Brian Sell                 | United States | 2:10:47, Chicago, 2006                      | Guessed seven                       |
| Nicole Stevenson           | Canada        | 2:32:56, Houston, 2006                      | Twenty                              |
| Dylan Wykes                | Canada        | 2:15:15, Rotterdam, 2008                    | Two                                 |

1. At time of interview

2. Wheelchair athlete

## Appendix D

### *Interview Guide*

#### Introduction Questions

1. How did you get involved in running? When did you start running competitively? Can you tell me about that?
2. When did you run your first marathon? Can you tell me about that first marathon? How many marathons have you run? How would you compare your recent marathons with your first marathon(s)?
3. Why do you run?

#### Best Performance Questions

1. Describe what focus means to you for running.
2. Describe your best ever marathon in detail. What were you focusing on, thinking or feeling before, during, and after the race? Detail:
  - a. The resting time before the marathon (the day before and the morning of). Did you mentally prepare for the race? If so, how?
  - b. The pre-race warm-up
  - c. The start line
  - d. The various parts of the race
  - e. The finish of the marathon
  - f. Immediately after the marathon
3. Why do you feel that this was your best race or one of your best races?
4. Did you have a specific race plan? Can you tell me about that?
5. What focus do you feel allows you to perform your best in running marathons?

6. Do you have a certain type of focus that you decide or plan to take into your races?
7. How do you deal with distractions or potential distractions before and during the race?  
Can you tell me what works and what doesn't work for you? What are the biggest challenges or potential challenges that you face in a marathon? Before, during, after?
8. How would you compare your focus in your best marathon(s) with a worst marathon?

#### Debrief Questions

1. Is there anything else that you would like to add?
2. How did you feel when I contacted you? Before we began the interview? While answering the questions? Now?