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Interpersonal relationships and the association with athlete's motivation, self-efficacy and fear of failure

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INTERPERSONAL RELATIONSHIPS AND THE ASSOCIATION WITH ATHLETE'S MOTIVATION, SELF-EFFICACY AND FEAR OF FAILURE

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CERTIFICATE OF APPROVAL

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ABSTRACT

The influence of interpersonal relationships on motivation and self-efficacy is often overlooked in athletics, especially individual sport athletes such as cross-country runners. Motivation is a driving force behind the success of athletes. If an athlete's interpersonal relationship affects their self-efficacy and motivation in a negative manner, then performance may suffer. Therefore, the purpose of this study was to investigate the effects interpersonal relationships have on an athlete's motivation, self-efficacy and fear of failure. The relationships examined in the study included the coach-athlete, father-athlete, mother-athlete, and partner-athlete. The participants consisted of collegiate female cross-country (XC) athletes (N= 54) ranging in age of 18-23 years at various colleges in the northeast. Each participant was sent a questionnaire packet including a profile demographic, the Perceptions of Parents Scales (POPS; Grolnick, Deci & Ryan, 1997), the Self-Regulation Questionnaire (SRQ; Ryan & Connell, 1989), the Perceived Competence Scale (PCS; McAuley, Duncan & Tammen, 1989), and the Performance Failure Appraisal Inventory Scale (PFAI; Conroy, 2002). The statistical analysis included descriptive measures, Pearson's correlation coefficients and a multiple regression analysis using SPSS statistical analysis software. Results found each relationship had significant correlations to female runner's motivation, XC motivation, self-efficacy and fear of failure. The mother-athlete relationship was found to significantly influence intrinsic motivation ($rMAS = .42$, $p <. 01$; $rMW = .48$, $p < .01$), XC amotivation ($rMI = -.31$, $p < .05$; $rMAS = -.38$, $p <.05$; $rMW = -.43$, $p < .05$), fear of failure (rMAS = -.33, $p < .05$) and self-efficacy ($rMI = .36$, $p < .05$; $rMAS = .50$, $p < .01$; $rMW = .43$, $p < .01$). Further, the father-athlete relationship was found significant in overall motivation,

specifically external regulation (*rFI* = -.40, $p < .01$), introjected regulation (*rFI* = -.32, $p < .05$) and intrinsic motivation (*rFAS* = .43, $p < .01$; *rFW* = .37, $p < .01$), XC amotivation (*rFI* = -.30, $p < .05$; *rFAS* = -.51, $p < .05$; *rFW* = -.53, $p < .05$), fear of failure (*rFAS* = -.36, $p < .05$; *rFW* = -.35, $p < .05$) and self-efficacy (*rFI* = .37, $p < .05$; *rFAS* = .48, $p < .01$; *rFW* = .48, $p < .01$). Likewise, the coach-athlete relationship was significant in overall motivation, specifically identified regulation (*rCA* = .37, $p < .05$; *rCAS* = .32, $p < .05$) and intrinsic motivation (*rCI* = .29, $p < .05$), XC amotivation (*rCI* = -.45, $p < .01$; *rCW* = -.46, $p < .01$), and self-efficacy (*rCI* = .36, $p < .01$; *rCW* = .42, $p < .01$). Moreover, the partner-athlete relationship was significant in overall motivation, specifically introjected regulation (*rPI* = -.56, $p < .05$), fear of failure (*rPI* = -.50, $p < .05$; *rPW* = -.51, $p < .05$) and self-efficacy (*rPI* = .56, $p < .05$; *rPAS* = .23, $p < .05$; *rPW* = .62, $p < .05$). However, the main finding of this study includes that the father-athlete relationship had the greatest impact on the athletes' motivation, self-efficacy, and fear of failure resulting in the highest correlations. Overall, each interpersonal relationship is associated with female XC athletes' motivation, self-efficacy and fear of failure, with this knowledge important others may be able to help their athlete reach their full potential by providing them with the basic fundamental needs, encourage positive self-perceptions and self-efficacy, enjoyment and foster self-determination.

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Table of Contents

LIST OF TABLES

Table Page

Chapter 1

INTRODUCTION

Self-determination theory (SDT) has been a popular topic among researchers since the 1970s. SDT focuses on sources of intrinsic motivation, or the tendency for individuals to act for the pure enjoyment (Ryan & Deci, 2000a). SDT is based on the three basic human needs: autonomy, competence and relatedness. If individuals perceive they receive these needs from participating in an activity, they will continue to participate in the fulfilling activity. According to Deci and Ryan (1987), people in supervisory positions can influence the intrinsic motivation of others through two interacting styles: a controlling style and an autonomy-supportive style. The controlling style uses authority to have influence on and targets an individuals' way of thinking by offering extrinsic incentives (Mageau & Vallerand, 2003). Conversely, the autonomy-supportive interpersonal style has the most influence on an individual's motivation. Individuals who have an autonomous interpersonal style take others' perspectives into account by offering choices, minimizing pressure and encouraging others. This autonomous style will then allow other individuals to have a sense of choice and initiate their own actions towards a goal, thus increasing their motivation. Therefore, the autonomy-supportive style encourages individuals to foster self-determination and creates conditions for individuals to experience a sense of personal autonomy, competence and relatedness (Vallerand & Losier, 1999).

Likewise, motivation is directly influenced by self-efficacy and interpersonal relationships (Bandura, 1977). Self-efficacy, or the individual belief in oneself that he or she has the ability to organize and perform the actions to produce a specific goal, can

enhance or hinder performances. Bandura (1977) also describes that self-efficacy is situation specific, or that it allows for an individual to be confident in a one area while not confident in a similar area. High self-efficacy creates a more driven individual, whereas low self-efficacy creates avoidance from tasks and low commitment (Bandura, 1994). Self-efficacy further contributes to motivation through goal setting, exertion of effort, and perseverance (Bandura, 1994). A cyclical pattern is created where self-efficacy increases motivation, which further increases self-efficacy. Additionally, self-efficacy is related to competence, in which self-efficacy is a measure of competence in individuals to accomplish and complete their tasks and goals (Ormrod, 2006).

A fear of failure may also be related to individuals' motivation and self-efficacy. Fear of failure is a multidimensional and hierarchical motive to avoid failure based on anticipatory shame, which creates negative physical and psychological effects. Conroy (2002) proposed five aversive consequences of failure that are associated with threat appraisal and fear. Research concludes that athlete's fear of failure affects their interpersonal behavior, performance and general well-being (Sagar, Lavallee, & Spray, 2009). Additionally, criticism from important others causes increased stress, low competence and motivation, and high anxiety and worry levels in athletes (Sagar & Stoeber, 2009). Thus, motivation, self-efficacy and fear of failure are all influenced by interpersonal relationships.

Interpersonal relationships are an important part of everyday life. Interpersonal relationships are defined as the relationship between the mother-athlete, father-athlete, coach-athlete and partner-athlete. These important others typically interact strongly and are closest to an individual. Important others provide individuals competence, relatedness

and autonomy as well as provide us with optimal function for growth, integration, social development and personal well-being (Ryan & Deci, 2000a). Specifically in sport, interpersonal relationships can enable athletes to build social relationships, develop positive self-perceptions, foster positive self-efficacy, create enjoyment and create self-determined forms of motivation (Boardley, Kavussanu, & Ring, 2008; Weiss, Amorose & Wilko, 2009).

A coach can enhance athlete's motivation and competence to gain positive outcomes in performance, enjoyment, self-esteem and ability (Boardley, Kavussanu, & Ring, 2008; Gillet, Vallerand, Amoura, & Baldes, 2010; Weiss, Amorose, & Wilko, 2009). In addition, the autonomous supportive style from coaches and parents is considered a positive influence on athlete's motivation (Keegan, Spray, Harwood, & Lavallee, 2010). Also, important others who display the autonomous supportive style offer a sense of relatedness or a sense of security in individuals (Keegan et al., 2010). Through increasing individuals' self-efficacy, important others are able to further increase individuals' perceived competence. Similarly, parents who offer unconditional support increase their athlete's motivation and confidence (Keegan et al., 2010). Significant others allow for an innate closeness through communication, which enables the athlete's relationship to be a positive influence on motivation and performance (Jowett & Cramer, 2009; Jowett & Meek, 2000). Thus, interpersonal relationships fulfill the basic fundamental needs, while still able to enhance individuals' motivation, and self-efficacy.

On the other hand, interpersonal relationships may also have a negative impact on athletes. For example, negative feedback could result in a decrease in performance and

self-efficacy, and may undermine the relationship with the feedback provider (Keegan, et al., 2010). While, many studies acknowledge a connection between motivation and self-efficacy and the relationships (Boardley, Kavussanu, & Ring, 2008; Jowett & Cramer, 2009; Keegan, Spray, Harwood, & Lavallee 2010), it is unclear which relationships are most related to athletes' motivation

Purpose of the Study

The purpose of this study is to investigate the association between interpersonal relationships and motivation in female cross-country athletes across NCAA Division I, II, and III at colleges and universities. Specifically, the study investigates (1) if interpersonal relationships are correlated with athlete motivation, self-efficacy, and fear of failure and (2) which, if any, interpersonal relationship has a stronger correlation with motivation, self-efficacy and fear of failure of an individual.

Hypotheses

It is hypothesized that (1) interpersonal relationships will have a positive correlation with overall motivation and motivation for cross-country (XC motivation). Furthermore, it is hypothesized that (2) athlete's self-efficacy will be positively related to the athlete's interpersonal relationships. In addition, it is hypothesized that (3) athlete's interpersonal relationships will be positively related to an athlete's lower fear of failure. Finally, it is hypothesized that (4) the coach-athlete relationship will have the largest association with the athlete's self-determined motivation, self-efficacy and fear of failure through a greater autonomy support, an increased relationship involvement and a higher relationship warmth when compared to the athlete's relationship with their mother, father and partner.

Significance of the Study

Four important interpersonal relationships in an athlete's athletic career and life include their relationships with their mother, father, coach and their partner. Interpersonal relationships foster an increase in self-efficacy and create enjoyment, which may lead to an increase in motivation and a decrease in fear of failure (Boardley, Kavnssanu, & Ring, 2008; Keegan, Spray, Harwood, & Lavallee, 2010; Weiss, Amorose & Wilko, 2009). Determining which relationships is most related to athlete's motivation and self-efficacy and how those relationships work can help psychologists, coaches, parents, partners, and peers help athletes be more successful in sport.

Delimitations

The following study was delimited to:

1. Only female participants who were current NCAA Division I, II, or III intercollegiate Cross-Country runners between the ages of 18-22 years.
2. Participants who had completed at least one season with their current cross-country coach.
3. Self-reported perceptions of others as opposed to actual behavior; therefore, no direct contact, visual emotion and expressions with the participants were noted.

Limitations

The limitations of the following study were:

1. The study relied only on the female athlete's perspective on her relationships with her mother, father, coach and significant other.

2. The results of the study may not apply to other genders, ages or level of athletes.
3. The results of this study may not apply to other individual or team athletes.
4. The study only examined the mother-athlete, father-athlete, coach-athlete and partner-athlete, thus other relationships may not apply to the results of this study.
5. This study was completed on a volunteer basis.

Assumptions

The following assumptions were made:

1. Participants responded to the questionnaires honestly.
2. Participants provided an accurate perception of their relationships.

Definition of Terms

Motivation – a driving force or influence behind a completed action, thought or performance. There are three types of motivation: intrinsic motivation, extrinsic motivation and amotivation.

Intrinsic motivation - participation for the pure enjoyment (Ryan & Deci, 2000a).

Extrinsic motivation - participation for instrumental reasons or as a means to an end (Ryan & Deci, 2000a).There are four types of extrinsic motivation: external regulation, introjected regulation, identified regulation and intregrated regulation.

External regulation – participation based on an external demand or reward (Ryan & Deci, 2000a).

Introjected regulation – participation based upon avoiding guilt or anxiety (Ryan & Deci, 2000a).

Identified regulation – participation based on valuing a goal based on personal importance (Ryan & Deci, 2000a).

Integrated regulation – participation based on the activity because the activity is associated with who he or she is, but still not participating for the pure enjoyment (Ryan & Deci, 2000a).

Amotivation - a lacking of intention or reason for participation (Ryan & Deci, 2000a).

Self-efficacy – a person's belief about their capabilities to succeed in specific circumstances **(**Bandura, 1974).

Competence- is the belief in one's ability and skills to achieve a desired outcome in broad areas. Competence is related to an individual's overall sense of achievement versus the specific situations of self-efficacy.

Coach – an individual who supports, leads and instructs players in the fundamentals of a competitive sport through strategies and training.

Parent – a person who provides, cares for, nurtures, protects, and raises a child.

Partner – a person who shares a romantic relationship with another individual.

Chapter 2

REVIEW OF LITERATURE

Introduction

In general, researchers have examined the effect of interpersonal relationships but recently researchers have examined the interpersonal relationships' effect on athlete's motivation (Balazas, 1974; Boardley, Kavussanu, & Ring, 2008; Gillet, Vallerand, Amoura & Baldes, 2010; Weiss, Amorose & Wilko, 2009) and self-efficacy (Jowett & Cramer, 2009; Jowett & Meek, 2000). The following review of literature focuses on theories related to an individual motivation and self-efficacy, specifically the review will cover: (1) Self-Determination Theory, (2) Self-Efficacy, (3) Fear of Failure, and (4) Interpersonal Relationships.

Self-Determination Theory

Everyone is motivated to perform tasks, goals or dreams in one way or another. Self-determination theory (SDT; Ryan & Deci, 2000b) is a framework describing motivation by examining how social and cultural factors facilitate or undermine individuals' volition or initiative towards a task, their well-being and the quality of performance. Further, SDT suggests that motivation falls on a continuum, ranging from amotivation to extrinsic motivation to intrinsic motivation.

The least self-determined state is amotivation, followed by external regulation, introjected regulation, identified regulation and the most self-determined form of motivation, intrinsic motivation (Grolnick, Deci, & Ryan, 1997). External regulated individuals perform tasks for external rewards, such as awards and praise or to avoid

punishment. For example, an individual who runs solely for the prize money at the end of the race is externally regulated. Introjected motivation implies that individuals will perform a task to avoid guilt or to comply with pressure from others. For example, youth participating in soccer because his or her parents would be upset if he or she did not play. An individual who competes solely due to pressure from their friends is motivated by introjected regulation. Identified regulation consists of individuals who identify with the importance of the behavior and has accepted it as part of who he or she is (Ryan & Deci, 2000a). For example, an individual who sees and values themselves as a runner and runs to maintain this self-image is motivated by identified regulation. Intrinsic motivation is a person's tendency to act or perform for the pure enjoyment of the activity, whether for social needs, cultural needs, well-being, or quality of performance. Intrinsically motivated individuals run because they love to run.

Intrinsically motivated athletes will play their sport with a strong sense of volition whereas extrinsically motivated athletes will perform not out of pleasure but for external rewards, which result from performance (Deci & Ryan, 1980). An individual whose motivation is self-determined, or is intrinsically motivated, will behave in a way that relates to their values (Deci & Ryan, 2000). Non self-determined individuals often feel pressure to engage in activity as opposed to valuing the activity. Motivation increases drastically when athletes' intrinsic motivation is nurtured by their interpersonal relationships (Mageau & Vallerand, 2003).

According to SDT, one's level of motivation along this continuum is related to the needs of competence, autonomy and relatedness. An individual's need satisfaction includes: autonomy (internal control or freedom to determine one's own behavior),

competence (the personal ability to perform the task successfully) and relatedness (a sense of security from other individuals (Ryan & Deci, 2000b). According to Ryan and Deci (2000b), the three innate needs are the basis for an individual's self-motivation, which can impact performance and well-being. Additionally, the need for autonomy, relatedness, and competence are essential for optimal functioning, social development and personal well-being (Ryan & Deci, 2000b).

Furthermore, competence is often related to the self-efficacy and fear of failure of an individual. For example, if a runner is confident, he or she will believe they can reach a specific goal related to a running event or meet. In other words, high self-efficacious individuals will typically be more competent during their tasks and thus a have low fear of failure as he or she believes they will be successful. An individual's strong sense in self-efficacy enhances accomplishments and personal well-being (Bandura, 1994). From a high self-efficacy and enhanced personal well-being, individuals may motivate themselves and form beliefs, goals and outcomes related to the task (Bandura, 1994).

An individual's fear of failure is also directly related to their competence and self-efficacy. Fear of failure, or the motive to avoid failure, involves cognitive, emotional and behavioral experiences that prompt the adoption of avoidance based goals and strategies (Conroy & Elliot, 2004). In other words, an individual with a high fear of failure typically has a lower competence and self-efficacy due to a belief they are going to fail. Further, these individuals prefer to avoid the shame and disappointment from others and are less likely to perform. Likewise, a high fear of failure associated with shame and anxiety that is related to an individual's achievements, decreases the likelihood of the individual to be

self-determined in further tasks (Conroy, 2004). Therefore, fear of failure levels can generally be related to the strength of an individual's competence and self-efficacy.

Additionally, significant others offer a central role in the quality of self-determination in individuals (Ryan & Deci, 2002). Our relationships with others and their behaviors may provide us with feelings of security thus providing us with an enhancement in our determination. Significant other's behavior can be broken down into two styles: autonomy-supportive and controlling interpersonal styles (Vallerand & Losier, 1999). Autonomy-supportive style promotes self-determination and creates conditions for individuals to experience a sense of personal autonomy, competence and relatedness. In other words, being autonomy supportive means an authoritative person acknowledges another's perceptions and feelings while still providing information and opportunities without pressure and demands (Black & Deci, 2000).

Weiss, Amorose and Wilko (2009) examined coaching behaviors, motivational climate and psychosocial outcomes among female adolescent soccer athletes. The authors found coaches who provide athletes with an environment emphasizing effort, persistence and improvement along with instructive feedback can influence athlete's self-perceptions, emotional reactions and motivational orientation (Weiss, Amorose, & Wilko, 2009). Furthermore, positive and informational feedback from coaches, along with mastery climates were significantly related to the perceptions of competence, enjoyment and intrinsic motivation of the athletes (Weiss, Amorose, & Wilko, 2009).

Likewise, Gillet, Vallerand, Amoura, and Baldes (2010) examined how the motivation and performance of 101 French judokas was influence by the coaches' autonomy support. Gillet and colleagues found that perceived autonomy support was

positively linked to self-determined motivation. In addition, the authors suggest autonomy supportive coaching style is effective for facilitating athlete's sport specific motivation, which indirectly impacts athlete's performance (Gillet et al., 2010). The authors conclude coaches' autonomy support influences self-determined motivation and sport performance (Gillet et al., 2010).

On the other hand, a controlling interpersonal style consists of a pressuring, coercive manner with the intention of imposing a certain way of thinking, feeling and behaving on another person. Bartholomew, Ntoumanis and Thogersen-Ntoumani (2011) examined the relationship of SDT with interpersonal control and thwarting (feeling pressured and anxious to behave a certain way; Deci & Ryan, 2012). Thwarting promotes a controlled motivation, which undermines intrinsic motivation, increases athletes' anxiety and negative emotions and pressures athletes participate for external measures (Deci & Ryan, 2012). Therefore, using SDT and the three basic needs (autonomy, relatedness and competence), Bartholomew et al. (2011) suggested an autonomy-supportive coaching behavior primarily predicted need satisfaction, which led to optimal functioning and well-being. As a result, individuals will choose and continue to choose to participate in activities that fulfill the three basic fundamental needs.

Self-Efficacy

Self-efficacy is the individual belief that he or she has the ability to perform their desired outcome in a specific situation. Self-efficacy is related to competence, in which self-efficacy is a measure of competence in individuals who accomplish and complete their tasks and goals (Ormrod, 2006). Further, individuals' self-efficacy leads to how an individual's belief that he or she can be successful in the overall picture. For example,

self-efficacy is related to how an individual may feel prior to running a race, but post-race, the individual would have more competence towards the success of his or her overall running. Thus self-efficacy is crucial in the development of competence.

Additionally, self-efficacy is directly influenced by motivation and interpersonal relationships (Bandura, 1977). Self-efficacy can directly influence athletes by either enhancing or hindering their performances. Athletes with a high self-efficacy are more driven, have higher accomplishments, and persist longer at a task. Athletes with low self-efficacy avoid difficult tasks, have low commitment and are slow to comeback from setbacks or failure (Bandura, 1994).

Self-efficacy is created by previous performances, vicarious experience, social persuasion, physiological states, emotional states and imaginable experiences (Bandura, 1994). Previous performances include successes, which build self-efficacy, and failures, which diminish self-efficacy. Previous performances are the most influential way to build self-efficacy because they are an individual's own mastery experiences. Mastery experiences influence self-efficacy because they are the self-appraisal of one's own performances. Mastery experiences allow individuals to experience minor setbacks and difficulties while reaching their goal with an extreme amount of effort. The setbacks allow individuals to realize they need a persistent effort to reach their goals. This realization enables the individuals to recognize they have the characteristics to succeed and rebound from further setbacks (Bandura, 1994).

Another way to strengthen self-efficacy is through vicarious experiences. Individuals increase their belief in themselves by seeing other comparable individuals achieve similar tasks, which is known as modeling. Modeling provides individuals with

an actual person who has the qualities, characteristics and the knowledge needed to achieve their goals.

The third way to strengthen people's beliefs in their success is to verbally persuade them that he or she has the ability to succeed, also known as social persuasion. Evaluative feedback, expectations on the part of others and self-talk all increase self-efficacy. Individuals who are persuaded in believing they possess the capabilities to achieve their goals are more likely to provide a greater effort and sustain the effort longer than if they internalize their self-doubts (Bandura, 1994). Successful self-efficacious individuals not only use social persuasion from others but also learn to measure their successes within their own terms. Coaches can influence the efficacy of their athletes through direct appeal, inspirational messages, evaluative feedback, expectations and attributions (Feltz, Short, & Sullivan, 2008). Attributional feedback from coaches who insist that success is ability based as opposed to luck or effort based further enhances the self-efficacy of their athletes.

Physiological feedback also influences self-efficacy. Physiological information includes the level of strength, fitness, fatigue and pain, which can influence self-efficacy by how the individual perceives their strength, fitness, fatigue and pain (Feltz, Short, & Sullivan, 2008). However, Bandura (1997) states the impact of physiological states on self-efficacy depends upon situational factors. For example, some athletes with muscle fatigue and soreness can view this as a lack of physical fitness, which would decrease their effort in their performances (Bandura, 1997). On the other hand, experienced athletes will not dwell on the soreness and learn to play through it.

Furthermore, emotional experiences, such as subjective feelings and moods, can influence self-efficacy. Subjective feelings or moods can be associated with fear or self-doubt. Conversely, emotions can also be associated with being psyched up and ready for performances. Additionally, certain emotions such as anxiety can be interpreted as lacking a skill to perform specific tasks (Feltz, Short, & Sullivan, 2008). Bandura (1997) concluded that the impact of mood on efficacy beliefs may be partially mediated by selected recall of past performances. For example, a previous success under positive moods produces a high level of self-efficacy. Athletes need to be able to interpret and perceive their emotional and physical reactions in a way that is not detrimental.

Finally, imaginal experiences, such as visualization, can enhance individual self-efficacy. Athletes who imagine themselves or others performing successfully in an anticipated situation or performance often raises the efficacy of the athlete (Feltz, Short, & Sullivan, 2008). For example, imagining oneself winning against an opponent can increase efficacy and performance. However, one must be confident in his or her own ability to use imagery as an effective tool.

Vargas and Short (2011) examined elite youth soccer athlete's perceptions of their coaches' pre-game speeches through questionnaires and surveys, specifically looking at the emotional states and the performance of the players. Overall, the elite male and female soccer players liked the pre-game speeches from their coaches due to the speech meeting their psychological and emotional needs, which they perceived as producing a positive impact to their performance (Vargas & Short, 2011). Furthermore, the speeches by the coaches helped athletes with arousal regulation, whether calming or exciting (Vargas & Short, 2011). The coaches were influencing emotions by creating a positive

environment, which led to strong performances and increased feelings of worth and self-efficacy, thus having a perceived positive influence on performance.

In addition, Weiss, Wiese and Klint (1989) studied the relationships between self-efficacy and performance in youth gymnastics. Specifically, the authors studied the relationship among self-efficacy, competitive anxiety, worry cognitions, years of experience and performance in young male gymnastics (Weiss, Wiese, & Klint, 1989). The 22 male gymnasts ranged in age from 7-18 years of age and participated in a state tournament. Major sources of stress for the gymnasts revolved around their worry about expectations and negative evaluations from significant others including coaches, parents and teammates (Weiss, Wiese, & Klint, 1989). In conclusion, the authors suggested that coaches focus on further enhancing self-efficacy in order to gain more positive outcomes in performance. In addition, Weiss, Wiese and Klint want coaches and parents to be aware of the influence that their expectations and potential evaluation of performance have on their athlete's motivation and self-efficacy.

Gilson, Reyes and Curnock (2012) found similar results as Weiss, Wiese and Klint (1989), and Vargas and Short (2011). Gilson and colleagues examined athlete's self-efficacy related to strength training effort during an off-season. All athletes were enrolled in a Division I Midwestern university and participated in football, volleyball, men's soccer or men's basketball (n = 99). Based on the results, coaches should work to increase the confidence and self-efficacy levels in their athletes (Gilson, Reyes, & Curnock, 2012). More specifically, coaches should structure the environment to allow for mastery experiences, which are a positive influence on self-efficacy (Bandura, 1994). Furthermore, the authors suggest coaches build confidence and self-efficacy through

vicarious experiences. Finally, Gilson et al. suggest enhancing confidence and self-efficacy through verbal persuasion. The authors state that verbal persuasion by the coaches may quickly produce increased feelings of self-efficacy by enhancing beliefs through positive suggestions. Additionally, Gilson, Reyes and Curnock (2012) state that coaches should focus on these three sources to enhance self-efficacy and confidence.

An individual's self-efficacy is directly related to their motivation. Self-efficacy contributes to motivation through the goals individuals set, how much effort they exert, how long they persevere in their difficulties, and the resilience in their failures (Bandura, 1994). This motivation and success enables athletes to further create beliefs about what they can do and encourages them to continue setting goals, thus continuing their motivation to achieve them. Those who have a low self-efficacy often feel depressed and have anxiety and lack motivation. These individuals seek out and cultivate social relationships to reverse the effects of their stressors and achieve satisfaction (Bandura, 1994). In conclusion, self-efficacy and motivation have a direct relationship such that if one increases the other increases and vice versa.

Fear of Failure

An individual's motivation and self-efficacy directly coincide with their fear of failure. Fear of failure is a multidimensional motive to avoid failure in situations based on anticipatory shame with failure. Fear of failure leads to a prevalence of negative physical and psychological effects such as depression, anxiety or eating disorders (Conroy, 2001a; Sagar, Lavallee, & Spray, 2007; Sagar & Stoeber, 2009). Conroy, Willow and Metzler (2002) view fear of failure as the tendency to appraise threats referring to the failure associated with meaningful performance goals. In other words, the authors suggest that

failure is perceived as threatening and feared by individuals who associate failure with consequences.

Conroy et al. (2002) propose five aversive consequences of failure that are associated with threat appraisal and fear. The five fears of failure include (1) fear of experiencing shame and embarrassment, (2) fear of devaluing one's self-estimate, (3) fear of an uncertain future, (4) fear of important others losing interest and (5) fear of upsetting others. To measure the strength of the individuals' beliefs in each of the five fears, Conroy and colleagues created the Performance Failure Appraisal Inventory (PFAI; Conroy et al., 2002). The PFAI is the first fear of failure measure developed from a meta-theory of emotions. Therefore, the PFAI is a function of person-environment interactions and recognizes individual nature of perceptions of failure (Sagar & Jowett, 2010).

According to Sagar, Lavallee and Spray (2009), elite athletes reported that fear of failure affected their interpersonal behavior, schoolwork, performance and general well-being. The nine elite subjects (five males, four females), ages from 14-17, were involved in a range of sports including basketball, triathlons, kickboxing, field hockey, soccer, and tennis, and all competed at the national and international level. The subjects reported that fear of failure increased the negative cognition and emotions prior to competition, which in turn affected their well-being, self-perception, and motivation. Furthermore, the athletes felt anxious and nervous up to four days prior to competition (Sagar, Lavallee, & Spray, 2009). Athlete's also reported their fear of failure made them more irritable, less social and less tolerant towards the people around them.

The development of fear of failure in youth is directly correlated to their interpersonal relationships. Conroy (2001) suggests the child's development of fear of

failure comes from three parental influences; (1) family structure, (2) parental demands for independence and mastery, and (3) parent-child communications. Family structure may cause fear of failure in children because mothers demonstrate fear of failure from martial conflict, irritability, communication avoidance, lack of consideration for their husbands, suppressed sexuality and maternal dependence (Singh, 1992). Furthermore, absent fathers in the family structure can add to the development of fear of failure in their children (Conroy, 2001). Parental demands for independence and mastery caused fear of failure in children due to parents expecting early independence behaviors, which instilled a fear of the consequences of failing (Schmalt, 1982; Winterbottom, 1958). Lastly, parents who demonstrated hostility towards their children by conveying high achievement expectations taught their children to associate hostility and failure with punishment. Furthermore, hostility caused children to fear parental retaliation such as physical or verbal punishment, which lead to perceived withdrawal of love and approval, or both (Conroy, 2001).

Sagar (2009) associates parents with the development of fear of failure due to their primary care giver role and attachment. As Conroy (2001) discussed the three parental influences, Sagar also concludes these are the main causes for the development of fear of failure in children. How parents project their fears, expectations and hopes onto their children and their children's successes and failures often impact the child's and the parent's fear of failure (Sagar, 2009). Parental fear of failure often impacts how parents view their and their child's fear of failure. Furthermore, parental fear of failure leads parents to display specific patterns of affect, cognition and behavior when their child fails. Thus, from their parents, children learn that mistakes and failures should be avoided

and start to fear failure (Sagar, 2009). For example, athletes associate mistakes and failures with displeasing their parents while winning pleases their parents (Sagar & Lavallee, 2010).

Sagar and Lavallee (2010) concluded that athletes who associated losing and failure with displeasing their parents often perceived love withdrawal and lack of communication as a punishment and learned to fear failure. This parental punitive behavior communicates to children that failure is shameful and that they are no longer worthy of their parent's love and affection (Sagar & Lavallee, 2010). The continuation of these actions from parents leads to a diminished sense of self-worth, negative self-evaluations and perhaps instills a self-punishing behavior. Thus, from the parental actions, the athlete's fear of failure increases and further causes negative consequences in emotional states, self-efficacy and general well-being (Sagar & Lavallee, 2010).

Sagar and Lavallee (2010) also found parental controlling behavior, in which the parents displayed an attempt to prevent their child's failure in competitions increased their child's fear of failure. By being so involved in the child's training and competition preparation, parents attempted to control the outcomes. These actions gave parents a sense of relief in their children's successes; however, the child disliked the high involvement of their parents and added a source of pressure. Parental controlling behavior threatens the parent-child relationship and forces the child to ignore their own values, thoughts and feelings in order to further prevent damage to the relationship (Sagar & Lavallee, 2010). Sagar and Lavallee (2010) conclude that parental controlling behavior can be detrimental to the child's well-being, sense of autonomy, self-determination, self-esteem, motivation and further contribute to the child's fear of failure.

The final aspect in which parents increase their child's fear of failure is through high parental expectations (Sagar & Lavallee, 2010). High parental expectations include a parental attempt to help their children in sport or to guarantee that their children will achieve success. Sagar and Lavallee (2010) report that expressed parental disappointment to children's mistakes and failures contributed to their child's appraisal of failure. The expressed disappointment evoked feelings of shame and guilt when the children were unable to meet their parent's expectations. Overall, parents teach children about meaning and values associated with different actions. Likewise, parental practices and negative responses to failure contribute to the development of fear of failure and thus impact the overall well-being of their children (Sagar & Lavallee, 2010).

A result from a recent study by Sagar and Stoeber (2009) acknowledges that coaches and parents may be a source of stress. The study, which included collegiate male and female athletes participating in various sports, concluded both coaches and parents give important, critical feedback about athlete's ability and performance as well as criticism and expectations, which may be a source of pressure and cause evaluative concerns for athletes (Sagar & Stoeber, 2009). In addition, coach and parent criticism and negative behaviors are associated with athlete stress, low perceived competence and motivation, fear of making mistakes, evaluation apprehension and high anxiety. In other words, perceived pressure from significant others is closely related to fear of failure. Thus, pressuring athletes to perform perfectly, avoid mistakes, meet high expectations and criticizing them when they fail to meet these expectations contributes to the development of fear of failure (Sagar & Stoeber, 2009). However, only perceived coach pressure, not perceived parental pressure, predicts athletes' affective reactions to success

and failure. Therefore, Sagar and Stoeber (2009) suggest the coach is the central source of perceived pressure to be perfect and is closely related to how athletes feel after competitions.

On the other hand, in a recent study by Sagar, Busch and Jowett (2010), their subjects, boarding school male soccer players, associated the pressure to succeed from self and from parents, not coaches. Similarly to the study completed by Sagar, Lavallee and Spray (2009), the subjects in this study felt fear of failure adversely affected their behavior, especially the short-term social interactions. Furthermore, upon failure, subject's experienced high levels of fear of failure due to their fear of losing interest from others. The interpersonal fear indicated anticipation of relational consequences such as losing social value, status and influence in the performance domain. However, subjects' success enhanced interpersonal relationships with significant others. The subjects received recognition from others, pleased others and enhanced social status and interactions.

While most coaches are knowledgeable about motivation and self-efficacy, fewer are familiar with fear of failure. Fear of failure is responsible for many youth quitting sports. By further understanding fear of failure, coaches and parents are able to recognize the symptoms of fear of failure and therefore help regulate or reduce those feelings. Thus coaches are able to work with their athletes better and athlete's perform better and raise their overall well-being (Sagar & Jowett, 2010).

Interpersonal Relationships

Clearly, relationships are important for success in athletics; athletes need to be able to fulfill their fundamental needs for autonomy, competence, and relatedness in

order to have continued motivation and thus success in their sport. Coaches, parents, significant others and peers are some of the most influential people who fulfill the basic psychological needs of relatedness, autonomy and competence. These three basic needs increase motivation, which increases self-efficacy, which then further increases motivation.

Coach-Athlete Relationship

A good coach will provide increased motivation and competence for athletes (Boardley, Kavussanu, & Ring, 2008; Gillet, Vallerand, Amoura, & Baldes, 2010; Weiss, Amorose, & Wilko, 2009). According to Boardley, Kavussanu and Ring (2008), the coach's effectiveness allows athletes to gain positive outcomes in performance, enjoyment, self-esteem and their perceived ability. The participants included English rugby players at varying levels of competition (recreational to professional). The participants completed surveys (the coaching efficacy scale, the intrinsic motivation inventory, and sport commitment) regarding coaching effectiveness and reported that when their coach had a higher self-efficacy about his or her coaching abilities, the coach-athlete relationship was better. The improved relationship due to effective coaching behaviors led to positive outcomes for the athletes; including better performances, more enjoyment, a higher perceived ability, increased confidence and greater self-efficacy in their athletes.

Weiss, Amorose and Wilko (2009) reported that coaches who created an environment for athletes that emphasized effort, persistence, and improvement positively influenced athlete's emotional reactions, self-perceptions and motivation. Their participants included female soccer players from nine high schools, who completed

questionnaires including coaching perceived behavior scale, motivation orientation in sport scale and an enjoyment scale. The study also concluded that coaches who provided positive and informational feedback improved athlete's competence, enjoyment and motivation, which was crucial for athletes continued participation and improved performances. In addition, the positive and informational feedback created a stronger desire and effort in achieving challenging and mastery experiences in athletes. Therefore, coaches play a vital role in enhancing the lives of athletes.

Similarly, Gillet, Vallerand, Amoura and Baldes (2010) found that perceived autonomous support from a coach was positively related to motivation of athletes. Their participants included French male and female Judokas who completed surveys such as the perceived autonomy support, situation and contextual motivation. Results indicated the support from the coach may increase an athlete's self-determined motivation and may indirectly influenced performance. In addition, the authors found when coaches considered athletes opinions in sport and acknowledged their feelings, athlete's motivation increased and thus also influenced sport performance (Gillet et al., 2010).

Jowett and Cramer (2010) reported that how athletes view their physical self is directly associated with the relationship between them and their coach. The study used questionnaires from 87 elite athletes varying from track and field to water polo. Results from the questionnaires suggested the more meaningful an athlete's relationship with their coach was related to the athlete having a higher perception of themself in body shape, mental competence, skill ability, physiological competence and overall performance. Therefore, a meaningful and supportive coach-athlete relationship impacts

how an athlete believes in themself and their ability to perform in their respective competitions (Jowett & Cramer, 2010).

Furthermore, Jowett and Cramer (2010) reported that the coach-athlete relationship, not the parent-athlete relationship, was the only significant relationship that could predict the athlete's description of self. Moreover, if conflict occurred within the coach-athlete relationship, the athlete often had negative perceptions of their physiological competence and overall performance. Also, a study investigating self-efficacy as a predictor of performance in gymnasts reported that coaches appear to be the best predictor of competition performance and self-efficacy in the athletes (Lee, 1982). Therefore, the coach-athlete relationship seems to be the best indicator of an athlete's perception of self, how motivated he or she is and how he or she will perform.

Jackson and Beauchamp (2010) reported from their semi-structure interviews with 12 international-level dyads, six athlete-athlete and six coach-athlete, that other people's perceptions play a role in an individual's confidence and self-efficacy, physiological and affective states and the experience of emotions. Furthermore, the authors state that athletes tend to be highly self-efficacious when they feel prepared for competition. Coaches who display positive signals, such as remaining calm, provide optimistic communication and positive body language, display a positive vibe to their athletes. The authors also concluded that when a coach or athlete believed the other was confident in their ability, he or she was more confident in their own ability and the relationship had greater satisfaction (Jackson & Beauchamp, 2010). Also, coaches who displayed a higher level of their own self-efficacy influenced the athlete to have a higher confidence and self-efficacy.

However, a study conducted by Keegan, Spray, Harwood and Lavallee (2010) found both coaches and parents were both highly influential on athlete's motivation. In the study, participants included 79 adolescents who were interviewed in 12 focus groups, with questions related to coach, parent and peer influence on their motivation (i.e. persistence, effort, focus, and enjoyment). Results indicated both coaches and parents influenced athletes through verbal feedback and behavioral reinforcement of the participants. Positive feedback consistently increased motivation while negative feedback either undermined motivation or provided an increase in motivation by a desire of proving their parents or coaches wrong. The coaching style also had a direct influence on the athlete's motivation (Keegan et al., 2010). Coaches who give equal treatment, were perceived as fair, and provide a one-to-one coaching were reported as a positive influence on athlete's motivation.

Parent-Athlete Relationship

Parents who bought the necessary equipment, offered unconditional support and provided transportation to and from practice or competition increased their athlete's motivation and confidence (Keegan et al., 2010). Parents who encouraged fun activities outside of practice, such as free or deliberated play, enhanced athlete competence. However, parents who consistently took the game home, provided embarrassing remarks during competition and provided conflicting advice to the athlete had a negative influence on the parent-athlete relationship, which in turn decreased the athlete's competence (Keegan et al. 2010).

Similarly to Boardley, Kavussanu and Ring (2008), Keegan et al. (2010) discussed that the autonomous supportive style was considered a positive influence on

motivation while a controlling style developed negative emotions such as frustration and anger. The characteristics reported of autonomy supportive style included showing interest, listening, supporting desires and allowing for athlete participation in decision making.

It is possible that differences between the parents may have had different effects on the child's motivation. For example, a parent who has a good relationship with their child and understands the sport he or she plays would positively influence the child's motivation. Whereas, a parent who does not understand the sport or has a poor relationship with their child, yet consistently made negative comments or 'tried' to help may diminish the motivation of their child. However, parents who did provide unconditional praise were seen as a positive influence on their child's motivation and in the parent-child relationship (Boardley et al., 2008),

Likewise, a study performed by Balzas (1974), which included an ex post facto analysis of 24 female Olympians, investigated the motivational inspirations behind why young girls participated in sport using interviews and a personal data questionnaire. She reported that family roles played an important part in the athlete's involvement as a youth. The father's roles were reported as being the most influential for their young athletes and were determined to be the most significant in the lives of the females by setting goals and providing values. The participants also reported that their parents were the main motivation behind their sport performances, mostly due to constant encouragement and feedback (Balzas, 1974). Overall, the positive influences from parents provided strong feelings of self-worth and self-esteem, which consequently provided the subjects with a higher motivation to achieve their goals (Balzas, 1974).

Bilgin and Akkapulu found similar results for adolescent athlete's perception of their parents (2007). The authors used questionnaires including the inventory of parent attachment and peer attachment as well as the interpersonal relationship scale with 194 high school students and their volunteered parent, who happened to be generally mothers. They found adolescents who have a positive perception of their parents had a higher individual self-efficacy, with mothers having a more meaningful effect on self-efficacy of adolescents due to their nourishing relationship style when compared to fathers and peers.

Partner-Athlete Relationship

Significant others provide encouragement and support throughout life (Jowett & Meek, 2000; Jowett & Cramer, 2009). Jowett and Meek (2000) investigated the relationship between four married coach-athlete dyads involved in track and field. Interestingly, for the married couples, the athletic relationship was ranked above the married relationship in closeness, co-orientation and complementarity. Married athletes and coaches worked well as a unit and worked off each other because of their closeness due to the feelings of respect, commitment and belief in each other, which was associated with their romantic relationship. The authors also reported an innate closeness through extensive communication, which was attributed to living together and the feelings the athletes and coaches had for one another from their romantic relationship.

A later study performed by Jowett and Cramer (2009) investigated the influence of romantic relationships on athletic performance and well-being. The athletes in the study reported their relationship often had a positive impact on their sport participation, which included track and field, football, ice-skating, rugby, softball, swimming, tennis, water polo, triathlons, badminton, diving and archery. The athletes also reported their

partner's actions did not contain a great deal of negative behaviors and therefore, negative behavior did not affect their sport performance. The authors concluded that for the athletes, their relationships might benefit their performance; however, higher levels of commitment in the relationship were associated with negative emotions that may impact performance. These negative emotions can lead to an increase in athlete depression and decrease in sport satisfaction (Jowett & Cramer, 2009). Therefore, romantic relationships can improve performance if positive; yet also have the ability to inhibit performance when negative emotions arise.

Conclusion

Previous research has examined motivation, self-efficacy, and interpersonal relationships and has established a relationship between motivation, self-efficacy, fear of failure and interpersonal relationships. However, the previous research has not examined each of the relationships, coach-athlete, parent-athlete, and partner-athlete in one complete study and has not determined which interpersonal relationship is most influential on the athlete's motivation and self-efficacy.

Further, interpersonal relationships are associated with individual's self-efficacy and fear of failure. Significant others influence the self-efficacy of individuals by their expectations and evaluations of particular tasks. Coaches, parents, and other important individuals also can build confidence and self-efficacy through allowing individuals to encounter vicarious experiences and social persuasion (Bandura, 1994). Likewise, the development of fear of failure often is established by parental demands and communication (Conroy, 2001). Additionally, fear of failure is enhanced by individual's fearing upsetting others and important others losing interest. Therefore, the aim of this

study is to examine which interpersonal relationship has the greatest influence on motivation, self-efficacy and fear of failure in female cross-country runners.

Chapter 3

METHODS

This study investigated how interpersonal relationships are related to motivation self-efficacy and fear of failure. The relationships studied included mother-athlete, father-athlete, coach-athlete and partner-athlete.

Participants

The participants included collegiate female cross-country athletes ($N = 54$), between two NCAA Division III colleges, SUNY Cortland ($N = 12$, 32% of the team) and Ithaca College ($N = 18$, 67% of the team), one Division II College, LeMoyne College ($N = 8$, 88% of the team), and two Division I colleges, Cornell University ($N = 13$, 26% of the team) and Binghamton University ($N = 3$, 27% of the team). The athlete's age ranged from 18 to 23 years ($M = 19.7$, $SD = 1.27$). The participants had competed in cross-country for an average of 5.9 years ($SD = 2.56$), ranging from 1 to 10 or more years. The participants had been with their current coach between 1 and 4 years ($M = 1.9$, $SD = 1.13$). Additionally, 57.4 % (31 out of 54) of the participants were single, whereas 42.6% (23 out of 54) were in a relationship. Finally, 79.4 % (47 out of 54) of the participants were Caucasian, 6.8% (4 out of 54) were Asian, 3.4 % (2 out of 54) were Hispanic and 1.7% (1 out of 54) categorized themself as "other."

Measures

The athletes completed a questionnaire packet including a demographic and four surveys assessing perceptions of their relationships, motivation, competence, and fear of failure. The demographic form asked questions about the length of cross country

participation, how long the participant had been with their current coach, if their parents were married and if the participants were in a relationship.

Perceptions of Parents Scale

The 42-item College-Student Scale version of the Perceptions of Parents Scale (POPS; Grolnick, Deci & Ryan, 1997) estimates the degree to which parents provide optimal parenting context. The POPS has a specific version called The College-Student Scale, which is intended for late adolescents. The scale is used to measure one's perception of their parents' autonomy support, involvement and warmth. Participants completed separate scales for each parent as well as for their coach and partner, totaling 84-items. The participants completed questions for each relationship such as 'My mother seems to know how I feel about things, 'My mother finds time to talk to me,' and 'My mother accepts me and likes me as I am,' regarding mother involvement, mother autonomy support and mother warmth. The questions were answered on a 7-point scale from 1 (*not at all true*) to 7 (*very true*). Niemiec, Lynch, Vansteenkiste, Bernstein, Deci, and Ryan, (2006) examined the relationship between parental support and their adolescents' self-regulation and well-being. The authors used the POPS in their study and found internal consistencies between $\alpha = .88$ and $\alpha = .90$ for the mother and father subscales.

Self-Regulation Questionnaire

The Self-Regulation Questionnaire for Exercise (SRQ-E; Ryan & Connell, 1989) helps determine why individuals participate in regular physical activities, including working out and sport involvement. The SQR-E consists three scales, (1) motivation for working out, (2) motivation for exercising regularly and (3) motivation for gymnastics.

For the purpose of this study, the 12- item motivation for working out and the 15-item motivation for gymnastics scales were used. However, the motivation for gymnastics scale was modified for cross-country, replacing "gymnastics" with "cross-country." The motivation for working out scale had examples such as 'Because I'd be afraid of falling too far out of shape' and 'Because I simply enjoy working out.' The motivation for cross-country scale examples included 'I learn valuable lessons from Cross-Country' and 'My parents, family or friends would be mad if I didn't run Cross-Country anymore.' The questions were answered using a 7-point scale from 1 (*not at all true*) to 7 (*very true*). Silva, Vieira, Coutinho, Minderico, Matos, Sardinha and Teixeira (2010) used the SQR-E in their study which examined the impact of an SDT based intervention on psychosocial mediators, exercise, body weight and composition during at 12 month period. The authors found an internal consistency between $\alpha = .67$ and $\alpha = .85$ for the subscales in the SQR-E.

Perceived Competence Scale

The Perceived Competence Scale (PCS; McAuley, Duncan & Tammen, 1989) is a four-item questionnaire, which measures personal feelings of competence about an overall sense of achievement. PCS assesses participants' feelings of competence about following up on a commitment or participating in a physical activity regularly. An example from the PCS included 'I am able to achieve my goals in Cross-Country.' The questions were answered using a 7-point scale from 1 *(not at all true)* to 7 *(very true)*. Williams and Deci (1996) used the PCS in their study, which examined medical students' learning of medical interviewing. The authors measured an internal consistency of perceived competence at $\alpha = .80$.

Performance Failure Appraisal Inventory Scale

The 5-item short form of Performance Failure Appraisal Inventory Scale (PFAI; Conroy, 2002) measures the strength of individuals' beliefs in five aversive consequences of failing: fear of experiencing shame and embarrassment, fear of devaluing one's self-esteem, fear of having an uncertain future, fear of important others losing interest, and fear of upsetting important others. The short form of the PFAI consists of one question measuring each of the five fears of failing. For example, one item included 'When I am failing, I am afraid that I might not have enough talent.' The questions were answered using a 5-point scale from -2 *(do not believe at all)* to +2 *(believe 100% of the time)*. Conroy and Coatsworth (2004) found internal consistencies of $\alpha = .72$ to $\alpha = .82$ in the short form of the PFAI in their study, the efficacy of psychosocial and injury prevention based coach training programs reducing fear of failure in youth swimmers.

Procedures

Prior to completing the study, the head cross-country coach from each school was contacted via an email. The goals and procedure of the study were explained and permission for their athletes' participation was obtained. The questionnaires were sent via email as an online link using Qualtrics to all the athletes. The athlete's email explained the study and included detailed instructions of how to complete the questionnaires. All participants gave their informed consent in adherence to The Ithaca College Human Subject Review Board HSR guidelines (Appendix A).

Data Analysis

Descriptive statistics were measured for the demographic profile and all variables. The statistical analysis consisted of Pearson's correlation coefficient and a linear multiple regression using PASW 18.0 statistical analysis software (SPSS, IBM; Quarry Bay, Hong Kong). The independent variables in the study were each of the relationships: the athlete's mother, father, coach and significant other. The dependent variables were athlete's overall motivation, XC motivation, fear of failure and athlete competence. To determine the correlations for athlete's motivation, each subscale within the SQR for overall motivation, (introjected regulation, external regulation, intrinsic motivation and identified regulation), and XC motivation (XC introjected regulation, XC external regulation, XC intrinsic motivation, XC amotivation and XC identified regulation), was correlated to each interpersonal relationship POPS score. Additionally, the PCS and FF scores were correlated with each interpersonal relationship POPS score to determine if competence and fear of failure was related to the athlete's interpersonal relationships.

The linear multiple regression included the interpersonal relationships POPS scores on independent variables to predict the athlete's XC motivation. The independent variables were entered into the regression model using the enter method. The multiple regression was used to determine which relationship was most related to the athletes' XC motivation. Only the predicted variables, which had a significant correlation between XC amotivation and the interpersonal relationships, were entered. The predictors in the XC amotivation model included partner, mother, father and coach warmth, mother, coach and father involvement, and mother and father autonomy support. Alpha was set at 0.05 to determine significance of the correlations and multiple regressions.

Chapter 4

RESULTS

The purpose of this study was to examine the influence of interpersonal relationships on female cross-country runner's overall motivation, XC motivation, self-efficacy, and fear of failure. The following chapter presents the results from this study. Internal consistencies and descriptive statistics are presented followed by the correlations of overall motivation, XC motivation, self-efficacy and fear of failure. Lastly, the results of the multiple regression for XC amotivation are provided.

Descriptive Statistics and Internal Consistency

Internal consistency for the scales used in the study was measured using Cronbach's alpha (Table 1). An acceptable internal consistency is above .70 (Field, 2009). All scales and subscales demonstrated reliable internal consistencies with the exception of XC motivation. Specifically, only XC amotivation scale demonstrated an acceptable internal reliability. Thus, due to low reliability, external regulation, introjected regulation, identified regulation, and intrinsic motivation subscales for XC were not used for further analysis. Lastly, the internal consistency of the fear of failure and competence scales was quite high, over .80.

Correlational Analyses

Interpersonal Relationships and Overall Motivation

To examine the hypothesis that interpersonal relationships were related to the motivation of female athletes, a series of correlational analyses were run examining each of the relationships, mother-athlete, father-athlete, coach-athlete and partner-athlete, with overall motivation and the subscales: intrinsic motivation, external regulation, introjected

Table 1

Descriptive Statistics for Each Interpersonal Relationship, Self-Determination, Fear of Failure, and Competence Scales

	No. of items	*M (SD)*	Range	Alpha
Age	-	19.67 (1.27)	18 – 23	
Years Running	-	5.91 (2.56)	1 – 10+	
Years with Coach	-	1.89 (1.13)	1 – 4	
Mother Involvement	6	6.09 (1.32)	1 – 7	.89
Mother Autonomy	9	5.57 (1.40)	1 – 7	.84
Mother Warmth	6	6.40 (0.96)	1 – 7	.82
Father Involvement	6	5.70 (1.63)	1 – 7	.92
Father Autonomy	9	5.53 (1.60)	1 – 7	.90
Father Warmth	6	6.23 (1.19)	1 – 7	.86
Coach Involvement	6	5.27 (1.55)	1 – 7	.89
Coach Autonomy	9	4.99 (1.63)	1 – 7	.87
Coach Warmth	6	5.32 (1.42)	1 – 7	.82
Partner Involvement	6	6.20 (1.21)	1 – 7	.80
Partner Autonomy	9	6.18 (1.19)	1 – 7	.85
Partner Warmth	6	6.62 (0.79)	1 – 7	.83
External Reg.	3	4.50 (1.63)	1 – 7	.71
Introjected Reg.	3	4.65 (1.55)	1 – 7	.75
Identified Reg.	3	6.41 (0.83)	1 – 7	.86
Intrinsic Mot.	3	5.64 (1.44)	1 – 7	.82
XC Amotivation	3	2.08 (1.67)	1 – 7	.83
XC External Reg.	2	1.64 (1.33)	1 – 7	.08
XC Introjected Reg.	2	4.01 (2.12)	1 – 7	.38
XC Identified Reg.	2	2.77 (0.99)	1 – 7	.55
XC Intrinsic Mot.	3	5.59 (1.35)	1 – 7	.34
Fear of Failure	5	3.13 (1.29)	1 – 5	.85
Competence	4	5.69 (1.43)	1 – 4	.89

regulation, and identified regulation. According to Cohen (1988, 1992) $r = .10$ is considered a low correlation, $r = .30$ is considered a moderate correlation, and $r = .50$ is considered a strong correlation (Cohen, 1988; Cohen, 1992).

Mother-Athlete Relationship. As displayed in Table 2, there was a moderate positive correlation between the mother-athlete relationship and intrinsic motivation; no other correlations with overall motivation were significant. However, both mother warmth and mother autonomy support and identified regulation approached significance with a low correlation. The positive correlation between mother autonomy support and intrinsic motivation suggests mothers who are supportive in their daughter's life may increase their daughter's overall intrinsic motivation. The positive correlation with mother warmth and intrinsic motivation suggests mothers who nurture and care about their daughter's choices in life could increase their daughter's overall intrinsic motivation. The full correlation tables of each relationship are displayed in Appendix B.

Table 2

Correlational Analysis for Overall Motivation and the Mother-Athlete Relationship

	Mother Involvement	Mother Autonomy	Mother Warmth
External Reg.	-.15	.14	.07
Introjected Reg.	-.14	-.04	-.12
Identified Reg.	.02	.29†	.27†
Intrinsic Mot.	.24	.42**	.48**

Note. $^{\dagger} = p \leq .08$; * = $p \leq .05$; ** = $p \leq .01$

Father-Athlete Relationship. External regulation and introjected regulation had moderate negative correlations with the athlete's father involvement (Table 3). Father autonomy support and father warmth had moderate positive correlations with intrinsic motivation. The negative correlations between father involvement and external and introjected regulation suggests the more involved fathers were in their daughter's life, the lower the athlete's external regulation and introjected regulation regarding their overall motivation. Furthermore, the positive correlation with intrinsic motivation and father autonomy support suggests supportive fathers had daughters with higher intrinsic motivation. Similarly, the positive correlation between father warmth and intrinsic motivation suggests, daughter's had a higher intrinsic motivation when they felt loved and close to their fathers. The full correlation tables of each relationship are displayed in Appendix B.

Table 3

Correlational Analysis for Overall Motivation and the Father-Athlete Relationship

	Father Involvement	Father Autonomy	Father Warmth
External Reg.	-.40**	-.11	-.19
Introjected Reg.	-.32*	-.18	-.24
Identified Reg.	-.14	.27†	.15
Intrinsic Mot.	.16	.43**	.37**

Note. $^{\dagger} = p \leq .08$; * = $p \leq .05$; ** = $p \leq .01$

Coach-Athlete Relationship. Table 4 displays the correlations between overall motivation and the coach-athlete relationship. Coach involvement and coach autonomy support had moderate positive correlations with identified regulation. Coach involvement had a low positive correlation with intrinsic motivation. The positive correlations between identified regulation and coach involvement and coach autonomy support suggest that consistent and high involvement and support from a coach can be associated with an athlete's sense of valuing goals rather than focusing on the outcome. Additionally, coach's involvement in their athlete's life is associated with a higher intrinsic motivation of their athletes. The full correlation tables of each relationship are displayed in Appendix B.

Table 4

Correlational Analysis for Overall Motivation and the Coach-Athlete Relationship

	Coach Involvement	Coach Autonomy	Coach Warmth
External Reg.	.12	.27†	.03
Introjected Reg.	.05	.28†	-.09
Identified Reg.	.37*	.32*	.28
Intrinsic Mot.	.29*	.05	.23

Note. † = $p \leq .08$; * = $p \leq .05$; ** = $p \leq .01$

Partner-Athlete Relationship. The correlations between overall motivation and the partner-athlete relationship are displayed in Table 5. Partner involvement had a strong negative correlation with introjected regulation. The negative correlation suggests partner

involvement in the athlete's life corresponds with a higher self-esteem and self-worth of the athlete. The partner relationship had no other significant correlations. The full correlation tables of each relationship are displayed in Appendix B.

Table 5

Correlational Analysis for Overall Motivation and the Partner-Athlete Relationship

	Partner Involvement	Partner Autonomy	Partner Warmth
External Reg.	-.37	.17	-.25
Introjected Reg.	-.56*	-.29	-.23
Identified Reg.	-.12	.28	-.02
Intrinsic Mot.	.24	.27	.13

Note. $N = 23$; * = $p \leq .05$; ** = $p \leq .01$

Interpersonal Relationships and XC Motivation

Only one of the XC motivation subscales, XC amotivation, was reliable. The relationship between interpersonal relationships and amotivation was examined using a correlation analysis between each relationship and the athlete's XC amotivation (Table 6). Results indicated significance between the mother-athlete relationship and the amotivation subscale. XC amotivation had moderate negative correlations with mother involvement, mother autonomy support, and mother warmth. In other words, a caring, supportive mother who is involved in their daughter's cross-country was associated with less XC amotivation on the part of the daughter.

Table 6

Correlational Analysis for XC Amotivation, Fear of Failure and Self Efficacy with Each Interpersonal Relationship

	XC Amotivation	Fear of Failure	Self- Efficacy
Mother Involvement	-.31*	-.17	.36*
Mother Autonomy	-.38*	-.33*	.50**
Mother Warmth	-.43*	-.21	.43**
Father Involvement	-.30*	-.28†	.37*
Father Autonomy	-.51*	-.36*	.48**
Father Warmth	-.53*	-.35*	.48**
Coach Involvement	-.45**	.00	.36*
Coach Autonomy	-.11	.27†	.44
Coach Warmth	-.46**	-.12	.42**
Partner Involvement	-.38	-.50*	.56*
Partner Autonomy	-.07	-.30	.23*
Partner Warmth	-.47	-.51*	.62*

Note. $^{\dagger} = p \leq .08$; * = $p \leq .05$; ** = $p \leq .01$

The father-athlete relationship had a significant correlation with XC amotivation. XC amotivation had moderate negative correlations with father involvement and father warmth and a strong negative correlation for father autonomy support (Table 6). Therefore, fathers who are supportive, involved and show warmth towards their

daughters and their involvement in cross-country may decrease their daughter's XC amotivation.

Likewise, the coach-athlete relationship had significant correlations with the XC amotivation subscale. Coach involvement and coach warmth were both negatively correlated with athlete's amotivation (Table 6). Therefore, involvement and caring aspects of a coach are related to lower XC amotivation in female athletes.

Finally, the partner-athlete relationships were not significantly correlated with the XC amotivation subscale (Table 6). Relationship warmth only approached significance with athlete XC amotivation. The full correlation table of all relationships with XC motivation is displayed in Appendix C.

Interpersonal Relationships and Fear of Failure

The hypothesis that an athlete's interpersonal relationships would have a direct relationship with athlete's fear of failure was examined with correlation analyses. The correlation analyses included the athlete's fear of failure scores and their interpersonal relationships with their mother, father, coach and partner. The hypothesis was supported by the correlation analyses.

First, in terms of athletes' relationships with their mothers, athletes' FF scores showed a small negative correlation with athletes' perceptions of mother autonomy support (Table 6). This suggests that athletes' FF is may decrease when their mothers provided autonomy support.

Second, in terms of athletes' relationships with their fathers, athletes' FF scores showed moderate negative correlations with athletes' perceptions of father autonomy support and father warmth, while father involvement approached significance. This

suggests that the perceptions athletes have of their fathers' support and warmth may be related to a lower FF in the athlete.

Third, in terms of athletes' relationships with their coaches, only perceived coach autonomy support approached significance. Thus, the results suggest the athletes' FF is not significantly associated with the athlete-coach relationship.

Fourth, in terms of athletes' relationships with their partners, athletes' FF scores showed a strong negative correlation with the athletes' perceptions of partner involvement and partner warmth, such that, low fear of failure was associated with high partner involvement and warmth (Table 6).

Interpersonal Relationships and Self-Efficacy

The hypothesis that the interpersonal relationships would have a direct relationship with athlete's self-efficacy was examined by a series of correlation analyses of interpersonal relationship with perceived competence. The hypothesis was fully supported by the correlation analysis.

First, in terms of athlete's relationships with their mothers, athletes' perceived competence scores showed moderate positive correlations with athletes' perceptions of mother involvement and mother warmth, as well as a strong positive correlation with athletes' perceptions of mother autonomy support (Table 6). Results suggest mother involvement and warmth had a positive association but mother autonomy support had a strong positive association with athletes' perceived competence.

Second, in terms of athletes' relationships with their fathers, athletes' perceptions of father involvement, autonomy support and warmth all had moderate positive correlations with the athlete's feelings of competence (Table 6). This suggests that

athletes' perceived competence was higher with positive perceptions of their father's involvement, autonomy support and warmth.

Third, in terms of athletes' relationships with their coach, athletes' perceptions of coach involvement and coach warmth resulted in moderate positive correlations with the athlete's competence (Table 6). This suggests athletes' perceived competence was higher when the athletes' perceptions of their coach's warmth and involvement were positive.

Fourth, in terms of athletes' relationships with their partner, athletes' perceptions of partner involvement and partner warmth had strong positive correlations with athlete's feelings of competence (Table 6). These results suggest athletes' perceived competence was higher when their partner showed more involvement and warmth in their life. The full correlation table is displayed in Appendix D.

Predictors of Cross-Country Motivation

A multiple regression analysis was used to measure the athletes' relationships on their self-determined XC amotivation. Based on the correlational analyses, the significant relationship variables with XC amotivation: (1) relationship warmth, (2) mother involvement, (3) coaching involvement, (4) mother autonomy support, (5) father involvement, (6) father autonomy support, (7) mother warmth, (8) father warmth, and (9) coach warmth, were included as predictor variables in the multiple regression analysis.

Results of the regression analysis, shown in Table 7, indicate that all predictors combined, partner, mother, father and coach warmth, mother, coach and father involvement, and mother and father autonomy support, did not significantly predicted XC amotivation ($R^2 = .95$, $F\ (9, 12) = 6.60$, $p = .09$). Table 7 provides a summary of the predictors and their unique effects for amotivation in XC.

Table 7

Summary of Predictors for Amotivation in XC.

	Unstandardized Coefficients		Standardized Coefficients	
Model	B	Std. Error	Beta	Sig.
(Constant)	67.889	15.348		.021
Mother Involvement	-.311	.320	-.459	.403
Mother Autonomy Support	.095	.214	.161	.688
Mother Warmth	-.196	.435	-.151	.683
Father Involvement	.209	.147	.402	.252
Father Autonomy Support	-.196	.149	-.453	.280
Father Warmth	-.089	.696	-.079	.906
Coach Involvement	-.793	.376	-1.345	.126
Coach Warmth	.733	.655	.897	.345
Partner Warmth	-.980	.562	-.835	.179

Note. Dependent Variable: AmotivationXC

Summary

In summary, the correlational analyses revealed that the athlete's interpersonal relationships are related to their overall motivation, XC motivation, FF and self-efficacy. However, the multiple regression analysis revealed that the model could not predict at the athlete's XC amotivation based on the predictor variables of mother warmth, mother autonomy support, mother involvement, father involvement, father warmth, father autonomy support, coach warmth, coach involvement, and partner warmth.

Chapter 5

DISCUSSION

The motivation individuals' possess often rely on the social and cultural factors surrounding them. This philosophy is described through SDT (Ryan & Deci, 2000b). The crucial social and cultural factors may undermine or enhance the initiation of tasks or performances. Further SDT associates the level of motivation related to the needs of competence, autonomy and relatedness. These innate needs are the basis for a person's self-determination, which may impact performance and well-being (Ryan & Deci, 2000b). Additionally, important others may provide individuals' with the feelings of competence, autonomy and relatedness. Our relationships with others, that provide the needs of competence, relatedness and autonomy, are also essential for optimal functioning, social development, personal well-being and influencing motivation (Ryan & Deci, 2000b). These relationships allow for the development of social relationships, positive self-perceptions and self-efficacy, enjoyment through life, and self-determined forms of motivation (Boardley, Kavnssanu & Ring, 2008; Weiss, Amorose & Wilko, 2009). This study examined the connection between athlete's interpersonal relationships with athlete motivation, self-efficacy and fear of failure. Results indicated that interpersonal relationships are related to overall motivation, motivation for XC, self-efficacy and fear of failure in the female athletes.

Overall Motivation

As hypothesized, interpersonal relationships were related to motivation. Each relationship, mother-athlete, father-athlete, coach-athlete, and partner-athlete, may

provide some influence on the motivation of the female cross-country runners by fulfilling the basic human needs of autonomy, competence and relatedness.

Parents

Specifically, athletes' perception of mother's autonomy support was related to increased levels of intrinsic motivation and decreased levels of amotivation. This finding between the mother-athlete relationship and athlete's motivation may have encouraged athletes to be more motivated to reach their goals. Father autonomy support and father warmth also contributed to an increased intrinsic motivation within their daughters. These findings regarding the mother and father relationships were similar to the results of Keegan, Spray, Harwood and Lavallee (2010), who found that unconditional praise from parents increased their child's motivation. Keegan et al. (2010) also found athlete' motivation was increased through positive verbal feedback from their parents.

The results from this study may offer mothers and fathers insight at how their relationship with their daughter may influence their daughter's overall motivation, motivation for sport, self-efficacy and fear of failure. From understanding the impact, parents may understand their role in their daughter's life and may be able to help improve their relationships with their daughters. However, no results to date examine the differences between the mother-daughter and the father-daughter relationships. Therefore, this study provides insight to the differences the mother-daughter and father-daughter relationships provide for the daughter. For example, it is possible that fathers have a larger impact on motivation due to their unique influence throughout their daughter's life. Katorski (2003) found the communication satisfaction and the attachment styles between the father-daughter relationships were very significant in the daughter's

life and reported that there was a strong relationship between communication adaptability for the father-daughter relationship. In other words, perhaps the dynamic of communication between the father-daughter relationships is modified depending on what the daughter may need in a particular circumstance. Similarly, Balzas (1974) reported that the father role was most influential on their daughter's athletic careers, goal setting and values. Fathers are important models and daughters often base their other relationships on the closeness they have with their fathers.

Additionally, Amoto and Gilbreth (1999) believe a child's emotionally close relationship with their father may benefit his or her well-being because fathers are more effective than other important individuals in monitoring, communicating, and teaching children the characteristics they value. Similarly, Hakoama and Ready (2011) found when children perceived that their fathers were available when needed, their perception of fathering quality was higher when compared to mothers. Therefore results from previous studies suggest the father-athlete relationship is associated with an increase in their athlete's motivation and self-esteem due to athlete perceived support, involvement and warmth (Amoto & Gilbreth, 1999; Hakoama & Ready, 2011). Thus, results from the current study should enable parents, and perhaps most importantly the father, to acknowledge they have an important positive influence on their daughter's overall motivation. Further, parents could potentially help their daughters by continuing to be supportive and a positive influence in their lives.

Coaches

Coach support and involvement was related to athlete intrinsic motivation and identified regulation. Therefore, when coaches were perceived as involved and

supportive, athletes had higher positive forms of XC motivation. Similarly, previous research has suggested, that coaches are able to influence the need satisfactions related to athlete motivation through rewards, feedback and interpersonal styles. These behaviors help create a climate which influences athlete motivation (Kipp & Amorose, 2008).

Partners

Lastly, when partners were perceived as providing warmth, athletes felt lower overall introjected regulation. This finding is similar to the results of Jowett and Cramer (2009) in which athletes who perceived their partner supportive led them to experience lower negative feelings within their sport. Thus, partners help regulate athlete's self-esteem by helping the athlete to be motivated to perform for positive measures rather than enhancing or maintain their self-esteem (Ryan & Deci, 2000b).

Despite a positive result regarding the partner-athlete relationship, perhaps the relationship would have been more influential if athletes had been in a romantic relationship for a longer period of time. Often with long relationships, the individual's involved feel that he or she can rely on their partner more frequently and with the closeness between them, sport performance can be enhanced along with increased involvement and commitment to the sport (Van Raalte, Petipas, Krieger, Lide, Thorpe, & Brewer, 2011). Therefore, each relationship added a crucial part to a higher sense of overall motivation and XC motivation in female runners.

XC Motivation

Similar to the impact of interpersonal relationships on general motivation, athlete's interpersonal relationships were associated to the athlete's XC amotivation. Athlete's perceptions of their mothers had a positive relationship with athlete's intrinsic

motivation, identified regulation, external regulation and amotivation, in cross-country. These mothers were perceived by their daughters as providing warmth, support and being involved in their daughter's XC careers, which increased with their positive forms of motivation while decreasing with the negative aspects of motivation in XC.

These results suggest mothers have a positive association with their daughter's XC motivation. These findings are similar to recent findings by Chan, Lonsdale and Fung (2012), who found that mothers may exert a greater influence on their child's physical activity experiences when compared to fathers, coaches and peers. Chan and colleagues (2012) suggest this may be a result of an older tradition where mothers often have the responsibility of taking care of their children. Additionally, mothers have been found to emphasize fun and encourage their daughters to participate and stay in sport (Leberman & LaVoi, 2011). Mothers may also be able to empathize and be sympathetic with their daughters because of similar experiences in sport (Leberman & LaVoi, 2011).

Likewise, the father-athlete relationship was a positive influence over their daughter's XC motivation. Athletes had lower feelings of XC amotivation, introjected regulation, and external regulation, while having increased XC intrinsic motivation when they perceived their fathers as involved, supportive, and providing warmth. This finding is different from the mother-athlete relationship, as fathers seem to have a greater impact at decreasing negative forms of XC motivation. Perhaps, father's are able to diminish negative feelings of XC by having a greater impact on their daughters self-esteem as previously discussed, versus mothers are often more empathic and often are supportive in a truly nurturing and caring way.

Furthermore the results of this study suggest that the father-athlete relationship is extremely influential in regards to XC and overall motivation. These results are similar to Duda and Balaguer (2007) who found a father-initiated mastery climate encouraged female athletes to focus on maximizing their potential by refining skills, learning from performance errors and a commitment to high goals. Additionally, positive influential support and necessary encouragement from parents increased athlete's motivation for goal-attainment (Balzas, 1974).

Keegan, Spray, Harwood and Lavallee (2010) found similar results in which athlete motivation was influenced by behavioral and verbal feedback from their parents. Specifically, Keegan and authors (2010) found unconditional praise increased athlete motivation and negative feedback undermined motivation and undermined the athlete's relationship with those who produced negative feedback. Thus, the current study's findings further support that the mother-athlete and father-athlete relationships may provide the basic psychological needs, of autonomy, competence and relatedness, while influencing their athlete's overall motivation and XC motivation. As previously stated, individuals who perceive they received the three psychological needs will continue to participate in the activities. Therefore, based on the results of this study, the mother-athlete and father-athlete relationships may support the innate needs for their daughters to continue to participate in cross-country through increased motivation.

Additionally, results suggest that athletes who perceived their coaches as involved and provided warmth had a lower negative form of XC motivation (amotivation), and a higher positive form of XC motivation (intrinsic motivation). Similarly, Gillet, Vallerand, Amoura and Baldes (2010) found coach autonomy support to increase motivation in sport

performance. Likewise, coaches who provided social support facilitated development of athletic performance (Philippe & Seiler, 2005). Therefore, coaches may have a crucial influence in their relationship with collegiate female cross-country runners.

Despite significant findings between the coach-athlete relationship, results suggest the mother-athlete and father-athlete relationships are more influential on overall motivation and XC motivation when compared to the coach-athlete and partner-athlete relationships. This may be a result from the constant caring and nurturing from parents the participants felt as they were growing up. Parents have often been a part of their daughter's life from day one and thus possibly continue to have a strong relationship while in college. Furthermore, perhaps the athletes do not have a significant relationship with their coach. For example, athletes will not deem their coach-athlete relationship important if they do not feel that they can trust their coach like they can their parents. On the other hand, perhaps the coaches are failing to emphasize effort, persistence and improvement while being critical of performances or are not perceived as being supportive. Moreover, by important others emphasizing effort, persistence and improvement and providing the basic needs of competence, relatedness and autonomy, individuals will be more self-determined to reach their goals (Ryan & Deci, 2002).

Similarly, perhaps the coach-athlete dyads in this study were not as significant as the parent-athlete relationships due to gender differences within the coaching dyads. Previous research has found male coaches are perceived as having a higher attention to detail and increased knowledge to be successful (Frey, Czech, Kent & Johnson, 2006). Additionally, athletes showed a higher level of respect to male coaches and accepted their male coaches' mentality (Frey, Czech, Kent & Johnson, 2006). In contrast, female

coaches were found be less motivated with a decreased game strategy efficacy, decreased coaching during competition, a lower knowledge and difficulty motivating athletes (Frey et al., 2006; Marback, Short, Short, & Sullivan, 2005). If this perception occurred, then perhaps athletes will not value their coach as a significant influence in their life. Further, the coach-athlete dyad will not be as important because the athlete will not gain the three innate needs of relatedness, competence and autonomy.

Fear of Failure

Athlete's interpersonal relationships are associated with the athlete's fear of failure. When the athlete's perceived mother and father support and father warmth, the athletes often had a lower fear of failure. These findings are similar to Gucciardi, Mahoney, Jalleh, Conocan and Parkes (2012), who reported that athletes with overly critical self-evaluations of performance, and perceptions of high expectations from significant others, resulted in a higher fear of failure in the athlete. In other words, athletes who believe their loved ones expect a certain outcome, fear their loved ones may lose interest and be disappointed if the outcome is not achieved and have an increased fear of failure. Thus, athletes who perceived only positive influences from their parents, such as warmth, involvement, and support, have higher self-efficacy and thus a decrease in fear of failure (Gucciardi, Mahoney, Jalleh, Conocan, & Parkes, 2012). In other words, when athletes feel their parents are proud of them despite the outcome of the competition, they can feel at ease, be more relaxed, enjoy their sport while understanding their parents are fully supportive. Moreover, the results of this study support Conroy (2001) and the FF theory in which parents who were supportive and provided warmth may decrease their child's fear of failure. The lower fear of failure would result from children not fearing

failure during a situation because of the love and support he or she feels from their parents.

Additionally, results further suggested athlete's felt a decreased fear of failure from perceived coach support and perceived partner involvement and warmth. Ultimately, fear of failure is what athletes perceive as likely consequences of failing (Conroy, 2008). Therefore, fear of failure may be lower in athletes who perceive support from important others because their fear of failing may be diminished, especially the fears of important others losing interest and upsetting important others. Thus, results could suggest when female runners perceive support from those who are closest to them, they may realize their loved ones will support, love and care for them despite the outcome of their competitions. In other words, athletes may notice that their parents, coaches and partners will be unaffected by the result of the athlete's competition and still care, support and love the athlete. Whereas, a high fear of failure can disrupt many aspects of an athlete's life, including their confidence, self-efficacy, and motivation. The fear of failure stems from disruptions in family structure, parental demands for independence and parent child communications (Conroy, 2001). Thus, for interpersonal relationships to decrease fear of failure, the athletes must not perceive such disruptions within their interpersonal relationships.

Interpersonal relationships can decrease the internal fear of failing by providing warmth and support. Recent studies by Conroy and colleagues (2007) found that high fear of failure scores are linked to lower competence and self-esteem. In other words, the higher fear of failure an individual has, the more likely he or she would view themself as not being able to achieve the task and may ultimately believe he or she will fail.

Similarly, Sagar and Stoeber (2009) found perceived pressure from significant others to perform perfectly, avoid mistakes and criticizing when they fail contributes to the athlete's fear of failure. Thus, the results of this study also suggested that interpersonal relationships may enable athletes to have a lower fear of failure, which may increase the athlete's competence and self-esteem. With a higher self-esteem and competence athletes' overall motivation and XC motivation could increase. Thus interpersonal relationships that are supportive, caring and active in their athlete's life and in sport should be able to influence their athlete's performance in a positive way.

In conclusion, the current study only analyses how the athlete perceives their interpersonal relationships and how each relationship may affect her overall motivation, and XC motivation. However, the study is meant to examine the effects of interpersonal relationships on athlete's overall motivation and XC motivation, not to observe if there is a cause and effect since performance was not evaluated. Overall, to truly understand how relationships affect motivation and ultimately performance, understanding the parent, coach and partner perceptions is equally important.

Self-Efficacy

Lastly, it was hypothesized that the athlete's level of self-efficacy is directly related to the athlete's interpersonal relationships. Involvement, warmth, and support from parents were most significantly related to perceived competence, which is itself related to self-efficacy. Self-efficacy is developed through mastery experiences, vicarious experiences, verbal persuasion, and reducing negative emotions (Bandura, 1997). Interpersonal relationships can help build self-efficacy by verbal persuasion and reducing negative emotions. Important others can enhance our self-efficacy by providing us with

the need of competence, or the overall belief in accomplishing goals, which enables individuals to believe he or she can accomplish a specific task.

Important others can also provide strategies for individuals to achieve their goals. Further, interpersonal relationships can empower the athlete to be successful by expressing their belief that the athlete can reach their goals. Keegan, Spray, Harwood and Lavallee (2010) found similar results to this study, in which a positive parental influence resulted in a positive influence in athlete self-esteem, which in turn led to an increased motivation.

Results from this study suggest athlete's self-efficacy increased with strong positive perceptions from their relationships with their coach and partner. Weiss, Amorose and Wilko (2009) found coaches who emphasized effort, persistence and improvement positively influenced their athletes self-perceptions, emotional reactions and motivation orientation. Weiss, Amorose and Wilko (2009) also found that a coach's feedback on performance could influence athlete's self-perceptions, emotional reactions and motivation orientation. Additionally, Boardley, Kavussanu and Ring (2008) found coaches were effective in increasing their athlete's motivation, helping athlete confidence and building self-esteem. Jowett, Shanmugan and Caccoulis, (2012) also proposed that a stable and harmonious coach-athlete relationship enabled the athlete to interpret and react to situations more positively, identify with the coach when a skill is demonstrated and is receptive to the coach's feedback. Jowett (2007) also suggests the coach-athlete relationship provides a social situation for developing beliefs of collective efficacy.

In a previous study by Jowett and Meek (2000) results suggested that partners, who were also their coach, influenced motivation of the athlete by the partner's ability to

provide support and assistance when it was needed. The authors also found that feelings of being loved, cared for and valued became important regarding trust and the dynamic for understanding their athlete and her goals. Therefore, results suggest that the involvement, warmth and support from interpersonal relationships could help athletes to believe that they can achieve their goals.

Parent Relationships vs. Coach Relationships

The results appear to show that the most influential relationships are the mother-athlete and father-athlete relationship as opposed to the coach-athlete relationship, which was hypothesized. The results of the regression analysis on the athlete's amotivation however were not significant. The predictor variables of partner, mother, father, and coach warmth, coach and father involvement, and father and mother autonomy support explained 78% of XC amotivation but were not significant.

A recent study by Sas-Nowosielki (2008) suggests perceived competence and relatedness in the study was a positive and significant influence on a student's amotivation. Therefore, important others who are able to provide the three basic needs of autonomy, competence and relatedness, may decrease an individual's amotivation. As previously stated, interpersonal relationships are important to athletes in order to fulfill their basic fundamental needs of autonomy, competence and relatedness.

Mothers contribute to the nourishing relationship style by caring and supporting their children. Mothers are influential on athlete's self-efficacy, which in turns increases competence and decreases amotivation (Bilgin & Akkapulu, 2007; Sas-Nowosielki, 2008). Fathers are reported as being the most influential on their daughters' athletic careers and are significant influences in goal setting, which may further increase their

daughter's perceived competence (Balzas, 1974). A coach who creates an athletic environment, which focuses on improvement, persistence and effort, is further related to the athlete's emotional reactions, self-perceptions and motivation (Weiss, Amorose & Wilko, 2009). Likewise, partners who are positive, provide encouragement and support often decrease the negative feelings within their life (Jowett & Meek, 2000; Jowett & Cramer, 2009). These findings support the results from this study, which suggests that each interpersonal relationship is related to the athlete's XC amotivation, by each relationship decreasing her amotivation.

Conclusion

Overall, from the results of this study, it can be concluded that each relationship had a significant association with an athlete's motivation, motivation for sport, fear of failure and self-efficacy. However, in contrast to the results of this study, where the interpersonal relationships of female athletes were investigated, it would be interesting to evaluate how male athletes' interpersonal relationships would impact their overall and sport motivation, self-efficacy, and fear of failure. Male athletes often come across as not desiring the three personal constructs of autonomy, closeness and relatedness. Furthermore, society often perceives men as being strong, tough, and independent of human desires whereas women are often portrayed as being needy and dependent. However, men are human beings and it is likely they do desire the interpersonal connection between other individuals.

Further, the results of the study should only be applied to individual female cross-country runners. This study may not apply to those who may have different coaching experiences such as athletes in technical sports. Future research could examine how

interpersonal relationships influence other individual athletes, such as equestrian riders and figure skaters. Perhaps, the interpersonal relationships would have different impacts in these sports as the coaches typically spend more time with the athletes, as technique is crucial to the sport. Further, research could also examine the contrast of the coach-athlete relationships in team versus individual sports. Perhaps in individual sports the coach is the primary source of feedback and motivation. While in team sports the athlete receives feedback, criticism and support from teammates as well. Frequently team sports have a difference dynamic than individual sports, as athletes must rely on their coaches and teammates to be successful in competitions.

Likewise, it is possible that people outside the team or even siblings have an important relationship with athlete motivation and self-efficacy. Thus while mothers, fathers, coaches and partners may provide direct influence with motivation and self-efficacy, this does not imply that other relationships may not be as or more important. With this study focusing on the mother, father, coach and partner relationships, it would be interesting to investigate how other interpersonal relationships influence athletes' lives, specifically the sibling and peer relationships, as these individuals grow up and are with the athletes throughout their college careers. In summary, each relationship added a crucial part to a higher sense of overall motivation and XC motivation in female runners.

In conclusion, the results of this study further support SDT in which important individuals who offer an anonymous supportive style enable others to initiate their own thoughts and choices thus fostering self-determination. The relationships with important others often creates an individual's perception of competence, relatedness and autonomy, which is the basis of an individual's motivation. It is not easy to say which relationship is

most important as each individual may value a relationship differently. Specifically, in this study as only female cross-country athletes were used and the study had a smaller sample size.

However, based on these results and this population of female runners it appears that the father-athlete relationship is most important as determined by the strongest correlations on overall motivation, XC amotivation, self-efficacy and fear of failure. The second most important relationship appears to be the mother-athlete relationship. These findings are similar to the current research, in which supportive parents are a positive influence on their children's motivation, and self-esteem (Balazas, 1974; Biglin & Akkapulu, 2007; Keegan, Spray, Harwood, & Lavallee, 2010).

Chapter 6

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study examined some of the interpersonal relationships athletes have which may influence their overall motivation, motivation in cross-country, self-efficacy and fear of failure. The 54 participants (all female) from various North Eastern Colleges and Universities completed questionnaires, consisting of the POPS, SQR-E, PCS and PFAI, which were analyzed by correlations and a multiple regression in SPSS statistical analysis software.

Interpersonal relationships are associated with overall motivation and motivation for cross-country of female athletes. For both overall and XC motivation the father-athlete relationship was most significant of the four relationships studied: father, mother, coach, and partner. Additionally, the father-athlete relationship resulted in strongly correlated results regarding the athlete's fear of failure, whereas the mother-athlete relationship resulted in strongly correlated results in the athlete's competence. Unfortunately, the multiple regression did not predict XC amotivation with the nine predictors.

Conclusions

Results of this study support the following conclusions:

1. Interpersonal relationships do relate to female cross-country athletes' overall motivation and motivation for sport.
2. Interpersonal relationships, specifically the mother-athlete relationship, do have a direct relationship on the athlete's fear of failure.

3. The athlete's level of competence is related to the athlete's interpersonal relationships.
4. The most important relationship on cross-country athlete's motivation is the father-athlete relationship whereas the mother-athlete relationship appears to be slightly more important on fear of failure and self-efficacy of the athlete.

Recommendations

The following recommendations for future study are to:

1. Examine the influence of interpersonal relationships on motivation, self-efficacy and fear of failure regarding individual sport male athletes.
2. Examine the influence of interpersonal relationships on motivation, self-efficacy and fear of failure in technical individual sports, such as equestrian or figure skating.
3. Examine how peers, teammates, and siblings influence the motivation, self-efficacy and fear of failure in athletes.
4. Examine how relationships are related to performance outcomes.
5. Examine how coaches, mothers, fathers, partners, siblings and peers feel they influence their athlete and his or her sport.

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Appendix A

INFORMED CONSENT

Interpersonal Relationships and the Effect on Athlete's Motivation, Self-Efficacy and Fear of Failure

Hello, my name is Lisa Holt. I am a former collegiate NCAA Division III cross-country runner who is currently finishing a Master's degree at Ithaca College. I am hoping you would complete this survey in order to help further our understanding of the effect interpersonal relationships have on female runners.

1. Purpose of the Study

   The purpose of the study is to examine the effect of interpersonal relationships on motivation and self-efficacy of female cross-country runners.

2. Benefits of the Study

   The benefits of this study are to understand how interpersonal relationships can influence and impact our female runners. Furthermore, I hope to understand which interpersonal relationship will influence motivation and self-efficacy of female runners the greatest.

3. What you will be asked to do:

Complete the questionnaire at the provided link. The questionnaire should take no longer than 15-20 minutes to complete. The survey can be accessed at [https://ithaca.qualtrics.com/SE/?SID=SV_eeY5aOvi5xH8NUg].

4. Risks

   The risks in this study are minimal. You will not feel any physical pain or psychological harm, yet you are asked questions about people who are close to you, which might cause some discomfort with some parts in the survey. To eliminate this, you may skip parts or questions, which you do not want to answer.

5. Need More Information?

   If you need any more information, have comments, or concerns please contact me at lholt1@ithaca.edu or (315) 447-7883.

6. Withdrawal From the Study

   You may choose to not answer any question, which makes you feel uncomfortable and you are able to withdraw at any time without penalty

7. How the Data will be Maintained

   Your participation will be completely confidential. The only known identifying variable will be what College or University you attend.

Continuing on and completing the survey concludes that you understand the potential risks in the study. Furthermore continuing on shows that you understand you are allowed to skip any questions and are free to end your participation at any time without penalty. Additionally, you must be at least 18 years of age to complete the survey.

Thank you in advance for your participation. It is greatly appreciated.

Appendix B

CORRELATIONS OF EACH REALTIONSHIP WITH ATHLETE'S OVERALL MOTIVATION

Table B1

Correlations Between Overall Motivation and the Mother-Athlete Relationship

	2	3	4	5	6	7
1. MAS	.59**	.85**	.14	-.04	.27	.42**
2. MI		.76**	-.15	-.14	.02	.24
3. MW			.07	-.11	.27	.48**
4. External				.58**	.49**	.10
5. Introjected					.26	-.23
6. Identified						.51**
7. Intrinsic						

Note. ** = $p \leq .05$, * = $p \leq .01$; MAS = Mother Autonomy Support; MI = Mother Involvement; MW = Mother Warmth.

Table B2

Correlations Between Overall Motivation and the Father-Athlete Relationship

	2	3	4	5	6	7
1. FAS	.61**	.78**	-.11	-.18	.27	.43**
2. FI		.65**	-.40**	-.32*	-.14	.16
3. FW			-.19	-.24	-.15	.37**
4. External				.57**	.49**	.10
5. Introjected					.26	-.23
6. Identified						.51**
7. Intrinsic						

Note. ** = $p \leq .05$, * = $p \leq .01$; FAS = Father Autonomy Support; FI = Father Involvement; FW = Father Warmth.

Table B3

Correlations Between Overall Motivation and the Coach-Athlete Relationship

	2	3	4	5	6	7
1. CAS	.57**	.68**	.27	.28	.32*	.05
2. CI		.77**	.12	.05	.37*	.29*
3. CW			.03	-.09	.28	.23
4. External				.57**	.49**	.10
5. Introjected					.26	-.23
6. Identified						.51**
7. Intrinsic						

Note. ** = $p \leq .05$, * = $p \leq .01$; CAS = Coach Autonomy Support; CI = Coach Involvement; CW = Coach Warmth.

Table B4

Correlations Between Overall Motivation and the Partner-Athlete Relationship

	2	3	4	5	6	7
1. PAS	.59**	.41	.17	-.29	.28	.27
2. PI		.77**	-.37	-.56*	-.12	.24
3. PW			-.25	-.23	-.02	.13
4. External				.57**	.49**	.10
5. Introjected					.26	-.23
6. Identified						.51**
7. Intrinsic						

Note. N = 23; ** = $p \leq .05$, * = $p \leq .01$; PAS = Partner Autonomy Support; PI = Partner Involvement; PW = Partner Warmth.

Appendix C

CORRELATIONS OF EACH REALTIONSHIP WITH ATHLETE'S MOTIVATION IN CROSS-COUNTRY

Table C1

Correlations Between Motivation for Cross-Country and the Mother-Athlete Relationship

	2	3	4	5	6	7	8
1. MAS	.58**	.85**	-.25	-.09	.35*	.37*	-.38**
2. MI		.76**	-.48**	-.24	.15	.09	-.31*
3. MW			-.52**	-.18	.38*	.29	-.43**
4. External				.24	-.44**	-.21	.46**
5. Introjected					.16	-.13	.26
6. Identified						.49	-.33*
7. Intrinsic							-.48**
8. Amotivation							

Note. ** = $p \leq .05$, * = $p \leq .01$; MAS = Mother Autonomy Support; MI = Mother Involvement; MW = Mother Warmth.

Table C2

Correlations Between Motivation for Cross-Country and the Father-Athlete Relationship

	2	3	4	5	6	7	8
1. FAS	.61**	.78**	-.52**	-.44**	.28	.33*	-.51**
2. FI		.65**	-.30*	-.36*	-.09	.09	-.30*
3. FW			-.49**	-.19	.28	.24	-.53**
4. External				.24	-.45**	-.21	.46**
5. Introjected					.16	-.13	.24
6. Identified						.49**	-.45**
7. Intrinsic							-.21
8. Amotivation							

Note. ** = $p \leq .05$, * = $p \leq .01$; FAS = Father Autonomy Support; FI = Father Involvement; FW = Father Warmth.

Table C3

Correlations Between Motivation for Cross-Country and the Coach-Athlete Relationship

	2	3	4	5	6	7	8
1. CAS	.57**	.68**	-.05	-.02	.09	-.07	-.11
2. CI		.77**	-.02	.03	.18	.31**	-.45**
3. CW			-.05	-.17	.05	.22	-.46**
4. External				.24	-.45**	-.21	.46**
5. Introjected					.16	-.13	.26
6. Identified						.49**	-.33*
7. Intrinsic							-.49**
8. Amotivation							

Note. ** = $p \leq .05$, * = $p \leq .01$; CAS = Coach Autonomy Support; CI = Coach Involvement; CW = Coach Warmth.

Table C4

Correlations Between Motivation for Cross-Country and the Partner-Athlete Relationship

	2	3	4	5	6	7	8
1. PAS	.59**	.41	-.29	-.43	.19	.50*	-.07
2. PI		.77**	-.25	-.66**	-.14	.37	-.38
3. PW			-.03	-.45	-.02	.26	-.47
4. External				.24	-.45**	-.21	.46**
5. Introjected					.16	-.13	.26
6. Identified						.49**	-.33**
7. Intrinsic							-.49**
8. Amotivation							

Note. N = 23; ** = $p \leq .05$, * = $p \leq .01$; PAS = Partner Autonomy Support; PI = Partner Involvement; PW = Partner Warmth.

Appendix D

CORRELATIONS OF EACH RELATIONSH WITH ATHLETE COMPETENCE AND FEAR OF FAILURE

Table D1

Correlations Between Athlete's Competence, Fear of Failure and Mother-Athlete Relationship

	2	3	4	5
1. MAS	.59**	.85**	.50**	-.33*
2. MI		.76**	.36	-.17
3. MW			.43**	-.21
4. Competence				-.33*
5. FF				

Note. ** = $p \leq .05$, * = $p \leq .01$; MAS = Mother Autonomy Support; MI = Mother Involvement; MW = Mother Warmth.

Table D2

Correlations Between Athlete's Competence, Fear of Failure and Father-Athlete Relationship

	2	3	4	5
1. FAS	.61**	.78**	.48**	-.38*
2. FI		.65**	.37*	-.28*
3. FW			.48**	-.35*
4. Competence				-.33*
5. FF				

Note. ** = $p \leq .05$, * = $p \leq .01$; FAS = Father Autonomy Support; FI = Father Involvement; FW = Father Warmth.

Table D3

Correlations Between Athlete's Competence, Fear of Failure and Coach-Athlete Relationship

	2	3	4	5
1. CAS	.57**	.68**	.04	.27
2. CI		.77**	.36*	.00
3. CW			.42**	-.12
4. Competence				-.33*
5. FF				

Note. ** = $p \leq .05$, * = $p \leq .01$; CAS = Coach Autonomy Support; CI = Coach Involvement; CW = Coach Warmth.

Table D4

Correlations Between Athlete's Competence, Fear of Failure and Partner-Athlete Relationship

	2	3	4	5
1. PAS	.59	.41	.23	-.30
2. PI		.77*	-.56*	-.50*
3. PW			.62**	-.51*
4. Competence				-.33*
5. FF				

Note. N = 23; ** = $p \leq .05$, * = $p \leq .01$; PAS = Partner Autonomy Support; PI = Partner Involvement; PW = Partner Warmth.

Appendix E

QUESTIONNAIRE

Q1 What college or university do you attend
- ❍ Binghamton University (1)
- ❍ Ithaca College (2)
- ❍ Cornell University (3)
- ❍ SUNY Cortland (4)
- ❍ LeMoyne College (5)
- ❍ Syracuse University (6)

Q2 How many years have you participated in Cross-Country?
- ❍ 1 (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 (7)
- ❍ 8 (8)
- ❍ 9 (9)
- ❍ 10 or more (10)

Q3 How many years have you competed for your current coach?
- ❍ 1 (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 (4)
- ❍ 5 (5)

Q4 How old are you?

Q5 What ethnicity are you?
- White/Caucasian (1)
- African American (2)
- Asian (3)
- Hispanic (4)
- Native American (5)
- Other (6)

Q6 What is your current dating status?
- Single (1)
- In a Relationship (2)

Q7 My parents are:
- Married (1)
- Divorced (2)

Q8 If your parents are divorced/separated, do you primarily live with one parent?
- Yes (1)
- No (2)

Q9 If your parents are divorced/separated, do you keep in contact with your other parent?
- Yes (1)
- No (2)

Q10 If your parents are divorced/separated, are either of them remarried?
- Yes (1)
- No (2)

Q11 If your parents are divorced/separated, who is remarried?
- Mother (1)
- Father (2)
- Both (3)

Q12 What is your current 5k personal record?

Q13 What is your current 6k personal record?

Please indicate how true each of these reasons is for why you work out by putting the number on the line using the scale.

Q14 Because I simply enjoy working out.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q15 Because working out is important and beneficial for my health and lifestyle.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q16 Because I would feel bad about myself if I didn't do it.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q17 Because it is fun and interesting.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q18 Because others like me better when I am in shape.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q19 Because I'd be afraid of falling too far out of shape.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q20 Because it helps my image.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q21 Because it is personally important to me to work out.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q22 Because I feel pressured to work out.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q23 Because I have a strong value for being active and healthy.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q24 For the pleasure of discovering and mastering new training.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 very true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q25 Because I want others to see me as physically fit.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 very true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Please answer the following questions about your mother. If you do not have any contact with your mother, but there is another adult of the same gender living with your house (for example, a stepmother) then please answer the questions about that other adult. If you have no contact with one of your parents, and there is not another adult of that same gender with whom you live, then leave the questions about that parent blank. If you have same sex parents, indicate that by substituting the correct parental status in place of the opposite gender.

Q26 My mother seems to know how I feel about things.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q27 My mother tries to tell me how to run my life.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q28 My mother finds time to talk with me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q29 My mother accepts me and likes me as I am.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q30 My mother, whenever possible, allows me to choose what to do.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q31 My mother doesn't seem to think of me often.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q32 My mother clearly conveys her love for me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q33 My mother listens to my opinion or perspective when I've got a problem.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q34 My mother spends a lot of time with me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q35 My mother makes me feel very special.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q36 My mother allow me to decide things for myself.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q37 My mother often seems too busy to attend to me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q38 My mother is often disapproving and unaccepting of me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q39 My mother insists upon me doing things her way.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q40 My mother is not very involved with my concerns.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q41 My mother is typically happy to see me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q42 My mother is usually willing to consider things from my point of view.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q43 My mother puts time and energy into helping me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q44 My mother helps me choose my own direction.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q45 My mother seems to be disappointed in me a lot.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q46 My mother isn't very sensitive to many of my needs.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Please answer the following questions about your father. If you do not have any contact with your father, but there is another adult of the same gender living with your house (for example, a stepfather) then please answer the questions about that other adult. If you have no contact with one of your parents, and there is not another adult of that same gender with whom you live, then leave the questions about that parent blank. If you have same sex parents, indicate that by substituting the correct parental status in place of the opposite gender.

Q47 My father seems to know how I feel about things.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q48 My father tries to tell me how to run my life.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q49 My father finds time to talk with me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q50 My father accepts me and likes me as I am.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q51 My father, whenever possible, allows me to choose what to do.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q52 My father doesn't seem to think of me often.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q53 My father clearly conveys his love for me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q54 My father listens to my opinion or perspective when I've got a problem.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q55 My father spends a lot of time with me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q56 My father makes me feel very special.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q57 My father allow me to decide things for myself.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q58 My father often seems too busy to attend to me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q59 My father is often disapproving and unaccepting of me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q60 My father insists upon me doing things his way.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q61 My father is not very involved with my concerns.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q62 My father is typically happy to see me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q63 My father is usually willing to consider things from my point of view.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q64 My father puts time and energy into helping me.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q65 My father helps me choose my own direction.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q66 My father seems to be disappointed in me a lot.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q67 My father isn't very sensitive to many of my needs.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Please answer the following questions based on how much the statements relate to you.

Q69 When I am failing, I am afraid that I might not have enough talent.
- ❍ -2 (Do not believe at all) (1)
- ❍ -1 (2)
- ❍ 0 (Believe 50% of the time) (3)
- ❍ 1 (4)
- ❍ 2 (Believe 100% of the time) (5)

Q70 When I am failing, it upsets my "plan" for the future.
- ❍ -2 (Do not believe at all) (1)
- ❍ 1 (2)
- ❍ 0 (Believe 50% of the time) (3)
- ❍ 1 (4)
- ❍ 2 (Believe 100% of the time) (5)

Q71 When I am not succeeding, people are less interested in me.
- ❍ -2 (Do not believe at all) (1)
- ❍ -1 (2)
- ❍ 0 (Believe 50% of the time) (3)
- ❍ 1 (4)
- ❍ 2 (Believe 100% of the time) (5)

Q72 When I am failing, important others are disappointed.
- ❍ -2 (Do not believe at all) (1)
- ❍ 1 (2)
- ❍ 0 (Believe 50% of the time) (3)
- ❍ 1 (4)
- ❍ 2 (Believe 100% of the time) (5)

Q73 When I am failing, I worry about what others think about me.
- ❍ -2 (Do not believe at all) (1)
- ❍ 1 (2)
- ❍ 0 (Believe 50% of the time) (3)
- ❍ 1 (4)
- ❍ 2 (Believe 100% of the time) (5)

Please answer the following questions about your coach.

Q74 My coach seems to know how I feel about things.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q75 My coach tries to tell me how to run my life.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q76 My coach finds time to talk with me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q77 My coach accepts me and likes me as I am.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q78 My coach, whenever possible, allows me to choose what to do.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q79 My coach doesn't seem to think of me often.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q80 My coach clearly conveys their love for me.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q81 My coach listens to my opinion or perspective when I've got a problem.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q82 My coach spends a lot of time with me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q83 My coach makes me feel very special.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q84 My coach allow me to decide things for myself.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q85 My coach often seems too busy to attend to me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q86 My coach is often disapproving and unaccepting of me.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q87 My coach insists upon me doing things their way.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q88 My coach is not very involved with my concerns.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q89 My coach is typically happy to see me.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q90 My coach is usually willing to consider things from my point of view.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q91 My coach puts time and energy into helping me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q92 My coach helps me to choose my own direction.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q93 My coach seems to be disappointed in me a lot.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Q94 My coach isn't very sensitive to many of my needs.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

There are a variety of reasons why people compete in track. Please indicate how true each of these reasons is for why you participate in cross-country.

Q95 For the pleasure I feel when I compete.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q96 I used to have good reasons for doing cross-country, but now I am asking myself if I should continue performing.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q97 I would feel bad about myself if I was not taking time to run cross-country.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q98 It is a good way to get exercise.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q99 My parents or other family members give me money or other rewards when I compete.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q100 For the excitement I feel when I am really involved in cross-country.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q101 I learn valuable lessons from cross-country.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q102 It is absolutely necessary for me to do cross-country to feel good about myself.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q103 It is not clear to me anymore; I don't really think cross-country is my sport.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q104 My parents, other family members, or friends tell me to do it.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q105 For the pleasure of discovering new techniques.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q106 I'm not sure why I still practice cross-country, I don't seem to be going anywhere in it.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Please respond to each of the following items in terms of how true it is for you with respect to cross-country.

Q107 I feel confident in my ability to participate in cross-country.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q108 I am capable of participating in cross-country.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q109 I am able to achieve my goals in cross-country.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Q110 I feel able to meet the challenge of performing well in cross-country.
- 1 not at all true (1)
- 2 (2)
- 3 (3)
- 4 somewhat true (4)
- 5 (5)
- 6 (6)
- 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

If you are not currently in a relationship, your participation is complete. Thank you we appreciate your participation. If you are in a relationship, please answer these questions about your partner.

Answer If What is your current dating status? In a Relationship Is Selected

Q111 My partner seems to know how I feel about things.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q112 My partner tries to tell me how to run my life.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q113 My partner finds time to talk with me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q114 My partner accepts me and likes me as I am.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q115 My partner, whenever possible, allows me to choose what to do.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q116 My partner doesn't seem to think of me often.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q117 My partner clearly conveys their love for me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q118 My partner listens to my opinion or perspective when I've got a problem.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q119 My partner spends a lot of time with me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q120 My partner makes me feel very special.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q121 My partner allow me to decide things for myself.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q122 My partner often seems too busy to attend to me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q123 My partner is often disapproving and unaccepting of me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q124 My partner insists upon me doing things their way.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q125 My partner is not very involved with my concerns.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q126 My partner is typically happy to see me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q127 My partner is usually willing to consider things from my point of view.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q128 My partner puts time and energy into helping me.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q129 My partner helps me to choose my own direction.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q130 My partner seems to be disappointed in me a lot.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Answer If What is your current dating status? In a Relationship Is Selected

Q131 My partner isn't very sensitive to many of my needs.
- ❍ 1 not at all true (1)
- ❍ 2 (2)
- ❍ 3 (3)
- ❍ 4 somewhat true (4)
- ❍ 5 (5)
- ❍ 6 (6)
- ❍ 7 very true (7)

Thank you we appreciate your participation.