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YOUTH ATHLETE LEADERS' USE OF TRANSFORMATIONAL BEHAVIOURS AND RELATIONS TO TRUST IN THE LEADER AND SPORT OUTCOMES

by

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THESIS

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Wilfrid Laurier University

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Abstract

Leadership is one of the most crucial factors determining whether a group succeeds or fails (Bass, 1990). Furthermore, leaders displaying transformational behaviours are thought to lift followers to higher levels of motivation to get them to perform beyond expectations (Bass, 1985), and they tend to have followers who are more committed and satisfied (Bass & Riggio, 2006). Another outcome of transformational leadership in organizations is that followers are more willing to trust leaders who show care and concern for the follower (Dirks & Ferrin, 2002). The purpose of the present study was to determine if the use of full range leadership behaviours by formal peer leaders on youth sport teams would relate to trust in the leader. Data were collected at two time points, once near the beginning of the season and again near the end of the season, using several questionnaires including the Multifactor Leadership Questionnaire – Form 5 (Bass & Avolio, 2004). Only data from participants who were present at both data collection points were included in the analyses of study hypotheses, which included 126 athletes (77 females, 49 males; mean age = 15.49) from 12 interdependent sport teams. It was found that perceptions of full range leadership were related to cognitive- and affect-based trust at both time points. Interestingly, the transformational components inspirational motivation and idealized influence (attributed) contributed positively, and the non-leadership component laissez-faire negatively, to the relationship with affect-based trust at both time points. The results of the current study also found that both transformational leadership behaviours and higher levels of trust related to athletes perceiving their leader as being effective and satisfying, as well as being willing to put in extra effort. The results lead to the suggestion that youth peer leaders' use of transformational behaviours will promote higher levels of trust from their teammates, over and above the use of transactional and non-leadership behaviours.



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Chapter 1: Introduction

Throughout the years, researchers have focused on understanding the mechanisms behind leadership. Their research spans not only organizational, military, and educational domains, but has also considered sport teams. The fascination with studying leadership comes from the belief that leaders are one of the most crucial factors determining whether a group succeeds or fails (Bass, 1990; Zaccaro & Klimoski, 2002). Notably, leaders establish relationships with their followers that subsequently influence members' satisfaction and whether they are motivated to perform (Bass, 1990).

It is a challenge to define leadership as there is no universal definition of what leadership entails because it can mean different things to different people. However, in perhaps the most widely used definition across domains, Northouse (2007) defined leadership as "a process whereby an individual influences a group of individuals to achieve a common goal" (p. 5). This definition is valuable because it includes specific components that are crucial for leadership to exist. One such component is that the individual has influence over others: A person cannot be a leader if they cannot influence others. So while every member of a team has the potential to take on a leadership role, not everyone does (Loughead, Hardy, & Eys, 2006). For example, athletes can take on an informal leadership role within the team by motivating team members towards a goal, however if they feel that their motivating actions will not make a difference, they will take no actions toward this role. Furthermore, even when individuals are assigned as leaders of their small group it does not mean that they will be effective, nor are assigned leaders necessarily the most influential member of a group (Glenn & Horn, 1993; Northouse, 2007). This is important because when leaders are selected there are a number of things that need to be taken into consideration, such as their ability to communicate and exert influence over others. While sport



is an excellent context for youth to learn leadership skills, these skills are not learned simply by participating but instead must be taught intentionally (Gould & Voelker, 2012).

Leaders may be considered effective when their group is high performing, when there is good group functioning, and when individual members have a positive experience within the group (e.g., desire to return, satisfaction, adherence, etc.) (Bass, 1990; Crozier, Loughead, & Munroe-Chandler, 2013; Price & Weiss, 2013). In order to be effective, leaders must address numerous fundamental leadership responsibilities. These include defining collective goals and strategies for how the team will accomplish those goals (Northouse, 2007). In other words, leaders need to ensure that all group members know what they are working toward so they can put their effort into trying to reach the goal. Effective leaders also ensure a constant interaction among members where they discuss expectations and support the group's competence by communicating problem solving strategies for goal attainment (Bass, 1990). In sport teams, effective leaders have been identified as those who serve as role models, are good communicators, and are trustworthy (Holmes, McNeil, & Adorna, 2010). Despite numerous antecedents of effective leadership, the individual experiences and perceptions of followers ultimately dictate the degree to which a leader is influential (Shields, Gardner, Bredemeier, & Bostro, 1997). This suggests that what some members of a group perceive as effective leadership behaviour, other members may not perceive as the same and therefore it may be beneficial for leaders to provide a range of behaviours to be most effective.

1.1 Coach Leadership

There are many sources of leadership that can be found within a sport team, with perhaps the most identifiable leadership source involving the coaching staff. Much of the research on coach leadership uses the Leadership Scale for Sports (LSS: Chelladurai & Saleh, 1980) that



assesses five proposed dimensions of coach leadership. These behavioural dimensions include training and instruction, social support, positive feedback, democratic behaviour, and autocratic behaviour. Training and instruction reflects the use of tactics to improve athletes' skill and performance, social support is the leader's ability to satisfy the interpersonal needs of team members, and positive feedback is behaviour that encourages and rewards good performance of team members (Loughead, Munroe-Chandler, Hoffmann, & Duguay, 2014; Vincer & Loughead, 2010). The two decision-making behaviours reflect the degree of input leaders allow team members to have in decisions that affect the team. Democratic behaviours allow team members input in the decision-making process, whereas autocratic behaviours are independent of additional input and emphasizes personal authority of the leader.

Chelladurai and Saleh (1980) proposed that these behaviours could be examined via three perspectives including perceived behaviours (how athletes see the coach's leadership), preferred behaviours (leadership behaviours that the athletes desire), and actual behaviours (coach's perception of his or her own behaviour; Horn & Carron, 1985). Contrasting each of these three perspectives allows researchers to measure the *congruency* between the different perspectives. In fact, it has been proposed that athletes are more satisfied when their preferred leadership behaviours are similar to how they perceive their coach's leadership behaviour (Andrew, 2009). This suggests that an athlete will feel more fulfilled in their team involvement if his or her coach's leadership behaviours are similar to how the athlete prefers them to be. This is especially true for the dimensions of training and instruction and the two decision-making behaviours (i.e., autocratic and democratic behaviours), which are the most salient dimensions for coach leadership (Andrew, 2009; Loughead & Hardy, 2005). Although both democratic and autocratic decision-making styles are possible for coaches to adopt, athletes typically describe



coach decision-making behaviours as being autocratic (Loughead & Hardy, 2005). However, the predominance of autocratic styles among coaches is concerning for athletes, who commonly prefer more democratic approaches and are likely to be more satisfied under such circumstances (Andrew, 2009).

Whereas behaviours displayed by the coach can have an impact on athletes' satisfaction, the overall relationship between the coach and athlete can also have an effect. Research based on the coach-athlete dyad suggests that subjective well-being and performance can be enhanced by a positive coach-athlete relationship that includes closeness (i.e., emotional connectedness that can include trust and support), commitment (i.e., desire to maintain the relationship), complementarity (i.e., cooperation and affiliative interactions that occur mostly in training and practice), and co-orientation (i.e., shared knowledge and understanding of the other's roles and values: Jowett & Felton, 2014). These relationship components are important over-and-above leadership style because they may generate positive perceptions of the group environment, such as collective efficacy (Hampson & Jowett, 2014) and cohesion (Jowett & Chaundy, 2004). Clearly, appropriate coaching behaviours not only lead to improved player satisfaction and performance, but are likely to enhance coach-athlete relationships and group environments more generally.

1.2 Peer Leadership

Although much of the research has examined the coach, leadership is not restricted to these individuals. Rather, leadership behaviours are demonstrated throughout teams, as individual members direct one another and take on mentorship roles (Crozier et al., 2013; Fransen, Vanbeselaere, De Cuyper, Vande Broek, & Boen, 2014; Loughead & Hardy, 2005; Loughead et al., 2006). Athlete leaders, or peer leaders, influence team members to work toward



a common goal and can occupy either a formal (i.e., those who are the assigned captain or assistant captains) or informal role (i.e., those who emerge as leaders through team interactions; Loughead et al., 2006). Often leaders can emerge among their peers because of leadership abilities, as athletes are able to pick out members on their team who are confident in their abilities, challenge themselves, and display appropriate behaviours (i.e., do the right things, do not get into trouble; Price & Weiss, 2011). Nonetheless, leadership is not confined to a select few. Crozier et al. (2013) found that athletes believe that approximately one-fifth of the team should consist of formal leaders, while approximately 66% of athletes on a team should fulfil an informal role. Furthermore, 57% of the athletes indicated that every member of the team should provide informal leadership, suggesting that athletes value informal leaders and that some athletes believe that there are never too many informal leaders on a team.

Peer leaders on interdependent sport teams are responsible for a variety of functions that are essential for a team to thrive, ranging from task and social responsibilities, to external functions. Leaders are fulfilling their *task* responsibilities when they help their team focus on its goals, clarify teammates' responsibilities and offer instructions, as well as assist in decision-making (Loughead et al., 2006). *Social* responsibilities include maintaining the harmony within the team by helping to solve interpersonal conflicts, making sure that teammates are involved and included in team events, and offering support to teammates. Lastly, *external* functions of the leader include community involvement, fundraising, and representing the team's interests in meetings. While these functions do not all need to be filled by formal leaders, athletes report the greatest satisfaction when they perceive a relatively equal number of leaders across all three functions (Eys, Loughead, & Hardy, 2007). However, athletes and coaches have also reported that external leaders may not be important or needed on a team (Fransen et al., 2014).



Recently it has been suggested that an additional function of *motivation* should be included, which relates to encouraging teammates on the field. Fransen and colleagues (2014) conducted a study asking both coaches and athletes about functions fulfilled on their sport team. It was found that motivational leadership emerged as a distinct role, and was identified as the second most important type of leader on the team, preceded only by task leaders. Furthermore, they found that only 2% of the athletes indicated that a team leader fulfilled all four functions on their team, and no more than 19% of the athlete leaders of the same team fulfilled more than one function. This means that these functions are fulfilled by a variety of players on the team, and that all functions do not necessarily need to be fulfilled by the formal team leader(s).

To fulfil these general functions there are several more specific behaviours that peer leaders perform, similar to the behaviours identified by Chelladurai in the LSS (Chelladurai & Saleh, 1980). Loughead and Hardy (2005) investigated the nature of peer leadership on interdependent and independent sports teams and found that peer leaders were important because athletes perceived coaches and peer leaders to display different leadership styles. Whereas coaches were perceived as using an autocratic decision-making style and placing emphasis on training and instruction, peer leaders were perceived by the athletes as displaying greater social support and positive feedback, along with a democratic decision-making style. This is important because it shows that peer leaders are responsible for fulfilling the needs of athletes that may not be fulfilled by coach leaders alone.

Further to the behaviours outlined by Chelladurai, there are several other behaviours that may be particularly desired in athlete leaders. These behaviours include being vocal and having good communication skills, leading by example and acting as a role model for other players, having a good overall attitude, demonstrating a strong work ethic, and using effective



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motivational techniques (Dupuis, Bloom, & Loughead, 2006; Holmes et al., 2010). When leaders display these behaviours, they provide a model regarding what needs to be done to achieve their goals and promote team norms. Whereas both coaches and peers place a high value on an athletes' physical ability when *selecting* leaders and predicting how successful a leader they will be (Glenn & Horn, 1993; Moran & Weiss, 2006), it is interesting to note that ability is not highly ranked when team members *self-rate* leadership qualities. This suggests that leadership qualities that people perceive as important in others are not the leadership qualities they see as important in themselves. As well, it has been suggested that there are numerous factors that make a peer leader successful, in addition to their abilities (Dupuis et al., 2006; Holmes et al., 2010; Holmes, McNeil, Adorna, & Procaccino, 2008). Therefore, if a captain is selected based on their athletic ability but they have poor communication skills and are not able to influence and motivate the group, they may not be a very effective leader.

1.3 Full Range Model of Leadership

While researchers have shown that both coach and athlete leaders on a sport team display behaviours to a different extent, these behaviours can be explored from a holistic view and categorized based on the Full Range Model of Leadership. Components of the model were first proposed by Burns (1978) and then expanded on by Bass (1985), and it provides a continuum of behaviours that range from transformational, transactional, and laissez-faire behaviours. While transformational and transactional leaders display a range of leadership behaviours, laissez-faire is a form of non-leadership where the leader takes no action in promoting goals or a vision for the group (Bass, 1999; Northouse, 2007). The full range model implies that, as opposed to only displaying a single type of leadership, leaders often selectively use both transformational and transactional components to best suit the context and situation (Bass, 1995; Bass, 1999; Bass &



Riggio, 2006). However, in general they will display more of one type over the others. The range of behaviours is assessed most often using the Multifactor Leadership Questionnaire (MLQ-5X; Bass, 1995; Bass & Avolio, 2004). Although there has been criticism surrounding the validity of the MLQ, Antonakis, Avolio, and Sivasubramaniam (2003) reported that the current 'Form 5X' version is a valid and reliable instrument in measuring the nine components of the full range theory.

Leaders who display transactional behaviours cater to followers' immediate self-interests. They focus on providing a reward system in order to get followers to complete tasks as expected (Northouse, 2007). Transactional leaders can display either contingent reward, or active or passive management-by-exception. Leaders who use *contingent reward* outline to their followers what needs to be done to be rewarded or to avoid punishment, the level of effort that is expected, and what will be received once the work has been satisfactorily completed (Bass, 1985; Bass & Riggio, 2006). This can be an actual reward or simply praise or scolding from the leader, but it has shown to be a moderately effective motivational tool. Somewhat less effective is the use of *management-by-exception*. In the active form, leaders actively monitor the work of their followers so they can catch the mistakes or errors and take corrective action when necessary (Bass & Riggio, 2006). In contrast, the passive form is revealed in leaders who do not monitor followers' work, but instead take corrective actions only after errors have occurred. This passive form is the least effective transactional leadership behaviour (Bass, Avolio, Jung, & Berson, 2003), and on the MLQ-5X it is grouped with laissez-faire behaviours as passive/avoidant leadership (Bass & Avolio, 2004). On a sport team, peer leader transactional leadership would likely only consist of psychological feedback such as praise or criticism, as decisions such as



playing time and monetary compensation would likely be left up to the coaches' and/or organization's discretion.

Transformational leaders work to get followers to look beyond their own self-interest for the good of the group, think about long-term developmental needs and goals instead of instant gratification (Bass, 1990), and lift followers to higher levels of motivation so they perform beyond expectations (Bass, 1985; Burns, 1978). There are four components involved in transformational leadership. The first is *idealized influence*, which is displayed by leaders who provide a clear vision for the group and act as role models for followers. These leaders demonstrate high standards and can be counted on to do the right thing, so followers trust and respect them and wish to be like them (Bass, 1985; Bass & Riggio, 2006). Two aspects of idealized influence are measured on the MLQ-5X: attributed charisma and behaviours. This is because it is thought that there is an interactive nature to idealized influence, in that it is both the behaviours displayed by the leader and the recognition of those behaviours by the follower (Bass & Riggio, 2006). Another component is inspirational motivation, where leaders motivate and inspire followers by displaying optimism and enthusiasm. They provide meaning and commitment to the group's goals and a shared vision of what the future could be if the work is put into meeting the goals (Bass & Riggio, 2006). Intellectual stimulation is also used by transformational leaders. This represents behaviours that push followers to be creative and problem solvers, and rethink ideas that they may have never previously questioned. Leaders act as teachers, mentors, or coaches to followers and get them to use strategic thinking and encourage them not to accept the status quo (Bass, 1985). Lastly, transformational leaders display *individualized consideration*, where they take time to give attention to each individual member, focusing on followers' need for growth and achievement. They treat followers as



individuals, often giving special attention to neglected members to make everyone feel as if they are an important part of the group (Bass, 1985; Bass & Riggio, 2006).

Transformational behaviours can be seen in how leaders interact with their followers. When Bass (1985) began his work on transformational leadership, he conducted a pilot study where he asked 70 male senior executives what made a leader transformational. He found that transformational leaders were described as setting clear and high standards of performance, encouraging followers, and providing help and support when needed. Transformational leaders were willing to share their knowledge and expertise with followers, which provided followers with confidence in their abilities. Bass used the results of this study to develop the previously mentioned transformational behavioural components. Although Bass' work was with senior executives, these behaviours are also evident in leaders of sport teams. Athlete leaders can be transformational by building good relationships with their teammates by showing care and support, by ensuring each member knows what needs to be done to reach their shared goal, and by guiding members with extra training if improvements are needed. They motivate teammates both in games and practice and build-up confidence in their teammates so that they feel like they can take on a leadership role themselves.

Another way of looking at transformational behaviours has emerged in the literature. Based on aspects of the MLQ-5X (Bass & Avolio, 2004) and the Transformational Leadership Inventory (Podsakoff, MacKenzie, Moorman, & Fetter, 1990), the Differentiated Transformational Leadership Inventory (DTLI; Hardy, Arthur, Jones, Shariff, Munnoch, Isaacs, Allsopp, 2010) was developed and includes six distinct transformational behaviours as well as one transactional dimension: Contingent reward. Similar to the previous conceptualization, this approach includes individualized consideration, intellectual stimulation, and inspirational



motivation. It also includes *fostering acceptance of group goals*, where leaders promote cooperation among followers so they can work toward the collective goal; *high performance expectations*, where leaders express to their followers the expectations for excellence; and *appropriate role modelling*, where leaders display appropriate values to set an example for followers to emulate (Callow, Smith, Hardy, Arthur, & Hardy, 2009).

The DTLI was originally developed for use in military settings. It has been used in studies of leadership on Ultimate Frisbee teams that found that fostering acceptance of group goals and promoting teamwork, high performance expectations, and individualized consideration predicted task cohesion (Callow et al., 2009; Smith, Arthur, Hardy, Callow, & Williams, 2013), whereas only fostering acceptance of group goals and promoting teamwork predicted social cohesion (Callow et al., 2009). The unique thing about Ultimate Frisbee teams is that the team captain also acts as the coach of the team, therefore results may differ for sport teams that have a distinct coach and peer leaders. Vella, Oades, and Crowe (2012) tried to validate the use of this tool to measure transformational leadership in youth soccer coaches. They found that changes needed to be made, as the original DTLI was not a good fit for use in youth sport. In particular, the subscale of 'high performance expectations' needed to be removed as it was inappropriate in the youth soccer context. As such, they created the Differentiated Transformational Leadership Inventory for Youth Sport (DTLI-YS) but noted limitations including the use of a homogenous sample that limited the generalizability of the tool. Additional studies could not be located to validate the use of this tool.

Based on previous research, transformational behaviours are highly regarded by athletes. Athletes value leaders who provide positive feedback, instruction and training, have good work ethic and communication skills, and are encouraging and motivational to the team (Dupuis et al.,



2006; Holmes et al., 2008; Holmes et al., 2010). Transformational leaders act as mentors to followers and instill the skills and confidence for followers to eventually become leaders themselves (Bass & Riggio, 2006; Burns, 1978). This elevation in confidence can lead to a number of benefits such as a positive well-being and ability to cope with stressful situations (Hoption, Phelan, & Barling, 2014). As further evidence of their importance, transformational leaders tend to have followers who are more committed and satisfied (Bass & Riggio, 2006). Many studies have shown that when leaders display transformational leadership there are many positive outcomes such as group cohesion, confidence within the team, and team performance (Bass et al., 2003; Price & Weiss, 2013; Schaubroeck, Lam, & Peng, 2011; Smith et al., 2013). In a study of leadership by martial arts leaders, coaches who displayed inspirational motivation, idealized influence (attributed charisma), and individualized consideration had the strongest impact on athletes' effectiveness, extra effort, and satisfaction (Rowold, 2006). Price and Weiss (2013) found that peer transformational leadership was positively related to soccer enjoyment and intrinsic motivation, as well as task cohesion, social cohesion, and collective efficacy. This suggests that transformational leadership can have a significant positive effect at both the individual and group levels. As well, adolescent peer leaders who display transformational behaviours are perceived as being satisfying and effective leaders and, as such, have teammates who are willing to put in extra effort (Zacharatos, Barling, & Kelloway, 2000). These studies demonstrate how important transformational leadership is to a team, and why it is crucial for transformational behaviours to be developed in coach, as well as peer, leaders.

1.4 Trust in Leadership

One of the major outcomes of transformational leadership, and the focus of the present thesis, is trust in the leader (Bass & Riggio, 2006; Dirks & Ferrin, 2002; Schaubroeck et al.,



2011). As with the concept of leadership, trust is something that is difficult to define as there are a number of ways to conceptualize it. From an examination of numerous cross-disciplinary studies, Rousseau, Sitkin, Burt, and Camerer (1998) proposed that a widely held definition of trust is that it "is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another" (p. 395). Trust is a fundamental aspect of any relationship and is a dynamic perception that ebbs and flows in all relationships (Miller & Perlman, 2009). Transformational leaders are often able to elicit trust from their followers because they show care and concern for the follower, and engage in behaviours that promote a higher-quality relationship (Dirks & Ferrin, 2002). As well, they provide the team with confidence in other members of the team because they ensure that everyone knows what needs to be done to be successful (Schaubroeck et al., 2011). It has also been found that trust acts as a mediator between transformational leadership behaviours and organizational citizenship behaviours (Podsakoff et al., 1990), as well as employee psychological well-being (Kelloway, Turner, Barling, & Loughlin, 2012). This suggests that trust may be essential for bringing out specific behaviours and outcomes in followers.

Interpersonal trust is proposed to have two principal forms – cognitive-based trust and affect-based trust (McAllister, 1995). Cognitive-based trust is reflected in cognitive appraisals of one's performance. Such trust can include the follower's appraisal of the leader's competence, reliability, and sincerity (Dirks & Ferrin, 2002; Schaubroeck et al., 2011). Conversely, affect-based trust is rooted within emotional appraisals of the leader. It is based on a sincere support and concern for the well-being of followers and emphasizes being able to feel as though one is part of the group through emotional connectedness (Dirks & Ferrin, 2002; Schaubroeck et al., 2011). It is also related to the ability to feel psychologically safe within the team, which is a



belief that one is able to take interpersonal risks because they are in a safe environment (Edmondson, 1999). It is the combination of both cognitive- and affect-based trust that makes up one's overall perception of trust in a leader, and it is believed that some level of cognitive-based trust is needed for the development of affect-based trust (McAllister, 1995).

Trust in leadership is important because it allows followers to be more willing to accept the leader's goals as their own, and work hard to reach these goals. It allows players to push aside doubt and delay any personal motivations to instead put all their effort behind the team's goals (Dirks, 2000). Researchers have shown that affect-based and cognitive-based trust in a leader can provide followers with more confidence in their leaders' abilities, which allows them to perform more effectively (Schaubroeck et al., 2011). This trust also allows followers to feel open in expressing concerns, which can lead to followers learning more from their experiences and developing better problem solving strategies. When there is trust in the leader, followers feel confident in sharing information, which could lead to better outcomes both for the team and the individual (Dirks & Ferrin, 2002, Kelloway et al., 2012; Podsakoff et al., 1990). In fact, cognitive- and affect-based trust have both been found to be positively related to team performance, however they do so through separate mediators; cognitive-based trust through the influence of team potency (i.e., collective efficacy), and affect-based trust through the influence of team psychological safety (Schaubroeck et al., 2011). Trust in the leader has also been found to have a positive effect on the organizational citizenship behaviours of courtesy, conscientiousness, sportsmanship, and altruism (Podsakoff et al., 1990). In a meta-analysis by Dirks and Ferrin (2002) it was found that trust in leadership can have a significant effect on attitudinal, behavioural, and performance outcomes.



As trust has been found to be important in the leader-follower relationship, much of the research on trust has explored the possible antecedents of trust – showing that trust is often greater when leaders are perceived as competent, consistent, and available (Butler, 1991; Mayer, Davis, & Schoorman, 1995). Furthermore, the characteristics of ability, benevolence, and integrity have been identified in multiple studies and it has been proposed by Burke, Sims, Lazzara, and Salas (2007) that most antecedents fall within one of these three categories. The use of transformational leadership behaviours, which has also been described as a benevolent characteristic (Burke et al., 2007) has been found to increase trust from followers, and this trust in their leader subsequently increased followers' psychological well-being (Kelloway et al., 2012). Conversely, the same study found that leaders who used transactional behaviours had a negative effect on trust and, in turn, the followers' psychological well-being.

While the majority of research on trust in leadership has focused on the benefits in the organizational domain, to date there is only one published study that has explored trust in leadership on sport teams. Dirks (2000) performed a study examining trust in NCAA basketball coaches, as well as teammates, and performance outcomes. Trust was measured at the beginning of the conference schedule using an adaptation of an instrument reported in McAllister (1995: see Dirks, 2000). It was found that trust in the coach had a significant effect on the team's subsequent winning percentage, and that the team's past performance had a significant effect on players' trust in the coach. This suggests that athletes are more willing to trust their leader if they have been successful in the past. It was also found that trust in teammates had a significant effect on team performance. While this study was beneficial for assessing trust in sport coaches and teammates, it is not without limitations. The study involved only male NCAA basketball coaches and players so there is limited generalizability of the findings. As well, it only examined trust in



the coaches' leadership, and as has been seen in previous studies, athlete leadership can be just as crucial, and perhaps even more important for certain tasks (Loughead & Hardy, 2005). As well, the study does not explore how trust relates to leadership styles, which is important as previous organizational research has shown that transformational leadership behaviours are potentially antecedent to perceptions of trust in the leader (Dirks & Ferrin, 2002, Kelloway et al., 2012).

Based on previous research it is easy to see why leaders are important, and how leaders can elevate their teams to the next level by developing appropriate and transformational relationships with team members. The effectiveness of a leader can determine if a team succeeds or fails (Bass, 1990), and leaders who display transformational behaviours are perceived by followers as being satisfying and effective (Zacharatos et al., 2000). A key outcome of the leader being transformational is that followers are more easily willing to place their trust in the leader, which allows them to push aside their personal motives and place all their energy into working towards the group's common goal (Dirks, 2000). Cognitive- and affect-based trust in a leader provides followers with confidence in the leader's abilities, which allows increased performance (Schaubroeck et al., 2011). The Full Range Model of Leadership is appropriate to use as it is meant to assess the full range of leadership behaviours (Bass and Riggio, 2006). As well, as it emphasizes the leader-follower relationship, it is appropriate for use in the sports setting. Although it was originally developed based on organizational and military settings, it has been successfully adapted and validated within the sport context (Hoption et al., 2014).

While there is limited research on trust in sport peer leaders, one can look to the research conducted in the organizational domain to appreciate the potential benefits that could emerge from trust in peer leaders. Not only can trust in the leader allow followers to open themselves up fully to the team, but it can potentially act as a mediator for other behaviours that are important



for having a successful team (Kelloway et al., 2012; Podsakoff et al., 1999). Trust in the leader can allow athletes to feel confident in expressing any concerns that they have with the leader, instead of keeping those concerns bottled up and having them manifest in negative and possible destructive behaviour towards the team (Schaubroeck et al., 2011). This can also be beneficial to a team if an athlete sees something that is occurring during a play that they view as a potential issue, or have a solution to improve play. This can lead to athletes taking more initiative in team tasks and taking on more leadership roles themselves. According to Burns (1978), being able to pass on leadership skills to a follower in order for them to eventually become leaders is of great importance, and it would make sense that followers who have a high degree of trust in their leader would be more eager to emulate that leader. Therefore, if a leader values the trust of their followers they should use transformational leadership behaviours.

The purpose of the present study was to investigate the leadership behaviours that generate trust in a youth peer leader, as well as outcomes that emerge because of this trust. The Full Range Model of Leadership was utilized to determine if trust in the peer leader is promoted through transformational leadership behaviours, and whether athletes' trust in their leader will be related to positive outcomes, such as positive leadership outcomes (i.e., effectiveness, extra effort, and satisfaction), better overall performance, and desire to return to the team. Although trust in the coaches' leadership has been examined previously, this study measured trust in youth athlete leaders. Notably, as previous research has shown, there is a difference between the leadership provided by a coach and by peer leaders on a team (Loughead & Hardy, 2005). Furthermore, athletes must both compete and co-operate with the peer leader, and so their trust in them may be more impactful for a range of outcomes. As well, unlike Dirks (2000) who investigated the coaches' performance based on the winning percentage of the team throughout



the season, this study used multiple measures of performance. The current study used two measures of individual performance (i.e., coaches' rating of athletes' overall individual performance and how it compared to their original expectations) to see if they were able to perform above expectations based on their trust in the leader. A separate measure of the team's overall performance was also obtained, and it was hoped that a clearer picture of trust and performance could be understood with these three assessments. Lastly, the current study is unique in that it is looking at leadership and trust in youth athletes. The majority of studies examining athlete leadership in sport have been conducted at the collegiate level (e.g., Callow et al., 2009; Crozier et al., 2013; Holmes et al., 2010, etc.), and researchers who have explored the links between transformational leadership, trust, and positive outcomes have done so in the organizational context. Furthermore, there are no known studies that have even considered trust in a leader at the youth level. Therefore, while these links have been established in the organizational context, this study was the first to assess whether these relationships carry over to the youth sport context with the team captain as the target leader.

It was expected that youth peer leaders who demonstrated transformational behaviours would be attributed a greater level of trust from their teammates and, in turn, that individual members, and the overall team would perform at a higher level when trust was perceived. Members of a team who perceived a greater level of trust in their leader would also report more positive leadership outcomes (i.e., extra effort) and a greater desire to return to the team the following season. Furthermore, those positive leadership outcomes would also be related to peer leader transformational leadership. Because of their theoretical similarities, it was also expected that the transformational behaviour idealized influence would be strongly related to trust in the leader, and individualized consideration would be related to affect-based trust.



Chapter 2: Methods

The current study adopted a longitudinal and cross-sectional approach to investigate the relationships among peer leaders use of the full range leadership behaviours and perceptions of trust in peer leaders on sport teams, and the subsequent influence on individual athlete outcomes. The following chapter will discuss the (a) participants, (b) measures, (c) procedures, and (d) the data analyses procedures.

2.1 Participants

Participants were recruited from various community competitive sport teams (i.e., hockey, ringette, and basketball). Competitive team sport athletes were selected because competitive teams have a more established structure so formal peer leaders are present and more essential to the team, as opposed to recreational teams. A power analysis was completed prior to data collection using G*Power 3.1. Based on a linear multiple regression F-test with a power of 0.80, p = 0.05, looking for a medium effect size, and having 9 predictors, 114 participants were needed. At Time 1, 157 participants were recruited and at Time 2 data were collected from an additional 23 participants, for a total of 180 participants (see Table 1 for participant demographics). However, due to a number of circumstances (e.g., injury, too much homework to attend practice early, family vacations, etc.), some of the participants from Time 1 were not present at the second data collection. Furthermore, some of the athletes at Time 2 were new participants (see Figure 1 for participant flow chart). Athlete ages ranged from 13 - 20 years (M = 15.59, SD = 1.31), and the mean team tenure was 3.04 years (SD = 2.52). Participants were recruited from community youth sport teams, with levels ranging from Minor Midget to Intermediate, and skill levels ranging from 'B' to 'AAA'. All participants completed the demographics questionnaire and a leadership inventory, which will be reported on in the



descriptive results. However, for the purpose of analysis of the main study variables, only participants who completed the study at both time points were included in the analysis. This was done so that the participant characteristics at both time points would be the same, and analyses could determine if relationships hold for these athletes across the season. There were 126 athletes who completed the study at both time points. These athletes had an average team tenure of 2.98 years (SD = 2.43) and an average age of 15.49 years (SD = 1.26). Athlete performance data were also collected from the coach of each of the 12 teams (10 male, 2 female).

2.2 Measures

Demographic information. In order to gain insight into the athletes who were participating in the study, participants completed demographic items in regard to their (a) gender, (b) age, (c) team tenure, (d) experience playing that sport (i.e., years playing competitively/noncompetitively), (e) whether or not they are a formal team captain, and (f) other sports they play competitively and whether they are a formal leader on those teams (see Appendix A).

Leadership inventory. Participants were asked exploratory questions about their perceptions of the formal peer leader on their team, such as how the leader was selected. They were also asked to rank seven leadership behaviours in order of importance for a leader in general, to gain insight into qualities that they perceive to be important in a leader (see Appendix A).

Full Range leadership. To assess full range leadership behaviours the Multifactor Leadership Questionnaire-5X (MLQ-5X; Bass & Avolio, 2004) was used (Appendix B). The MLQ-5X has 36 items that measure how frequently, or to what degree, the participant observes their leader to display a range of behaviours from laissez-faire to transactional to transformational. The transformational subscale has 4 items for each behaviour (i.e., idealized



influence-attributed, idealized influence-behaviours, inspirational motivation, intellectual stimulation, and individualized consideration). The transactional subscale also has 4 items for each of the transactional behaviours (i.e., contingent reward and management-by-exception – active), as does the passive/avoidant subscale (i.e., management-by-exception – passive and laissez-faire). Questions were reworded slightly to reflect the sport context, and responses were provided on a 5-point Likert-type scale ranging from 0 (*not at all*) to 4 (*frequently or always*).

The use of the MLQ-5X is advantageous because it allows for measurement of a range of leadership behaviours from effective to ineffective, and can assess specific behaviours that are not included in other instruments – namely, inspirational motivation (Bass & Avolio, 2004). Additional instruction was added for the athletes to focus on answering the questions based on the team captain on their current team. As well, the header 'my leader' was replaced with 'my team captain'.

The MLQ has been developed and refined over more than two decades (Antonakis et al., 2003; Bass & Avolio, 2004) and the tool is a valid representation of the Full Range Leadership Model. The current version has been shaped by results of previous versions, suggestions from leadership scholars, as well as both discriminatory and confirmatory factor analyses (Antonakis et al., 2003; Bass & Avolio, 2004).

The MLQ-5X has been used with adolescent sport teams (Charbonneau, Barling, & Kelloway, 2001; Zacharatos et al., 2000) in understanding the development and effects of adolescents' transformational leadership use. However, as they were only interested in transformational leadership, only the four dimensions of transformational leadership were utilized in those studies. Nevertheless, Zacharatos and colleagues (2000) were able to show that



adolescents do display transformational leadership behaviours, and that the MLQ-5X is an appropriate tool to use for this population.

Outcomes of leadership. Three additional subscales from the MLQ-5X (Bass & Avolio, 2004) were used to assess potential outcomes of leadership (Appendix B). These include 3 items to assess extra effort by the follower, 4 items to assess leader effectiveness, and 2 items to assess satisfaction with the leader. Questions such as "gets me to do more than I expected to do" and "uses methods of leadership that are satisfying" are answered on a 5-point Likert-type scale ranging from 0 (*not at all*) to 4 (*frequently or always*). These items have also been used with adolescent sport teams (Zacharatos et al., 2000). It should be noted that the MLQ-5X is a copyrighted questionnaire and approval to use it was obtained from the owners (see Appendix C).

Trust in peer leadership. Athletes' trust in their peer leader was assessed using an adapted version of the instrument reported in McAllister (1995) and applied within the sport context by Dirks (2000). For the current study there were minor wording changes to reflect the leader as the peer leader as opposed to the coach (Appendix D). This trust in leadership scale includes 9 items that are answered using a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Questions reflect the amount of cognitive-based (5-items) and affect-based (4-items) trust followers have in their leader. An example is "I can talk freely to my peer leader about difficulties I am having on the team and know that he/she will want to listen". Additional instruction was added for the athletes to focus on answering the questions based on the team captain on their current team.



This measure appears to have strong validity and reliability, as factor analyses run by Dirks (2000) demonstrated items loaded highly on appropriate factors (i.e., factor loadings ranged from .84 to .96) and show good internal consistency (i.e., a = .96).

Individual performance. Individual performance was assessed at Time 2 by asking the coach to rate each player on how well they performed and whether they exceeded their expectations (Appendix E). Coaches were asked to rate each player on a scale of 1 (*poor*) to 8 (*excellent*) based on their overall performance throughout the season, compared to other players in the division. This was done so there would be more variability in the ratings because their performance is being compared to all of the players in the division, as opposed to the 8-20 players on the same team. They were also asked if the player performed to expectations, which was answered on a 3-point scale of "above", "met" or "below". Athletes were identified by their jersey number so that the rating could be matched with their identification code and to maintain relative anonymity.

Team performance. The overall performance of the team was determined at the end of the season through one of two methods: (1) by obtaining the winning percentage of the team or (2) through the team's ranking within the league. All team records were received from official league websites, however, hockey and ringette team statistics had game records whereas basketball team statistics were obtained using a league ranking system. Therefore, hockey and ringette teams were allotted 2 points for a win, 1 point for a tie, and 0 points for a loss. Total points were then divided by the total amount of points possible (i.e., 50 games played would equal 100 points possible). After a winning percentage was obtained, teams were categorized as either a 'high' or 'low' performing team. This was done so that a single measure of team performance could be assessed, as a winning percentage could not be determined for all teams.



Therefore, teams that had a winning percentage above .500 (or ranked in the top 50% of teams) were considered a 'high' performing team, while teams at .500 and below (or ranked in the bottom 50% of teams) were considered 'low' performing.

Intention to return. At Time 2, athletes were asked to rate their agreement to statements related to their intentions to return to the sport the following year (Appendix F). These statements have been used in the sport context and are considered an appropriate measure of an athletes' intention to return to the sport (Eys, Carron, Bray, & Beauchamp, 2005; Spink, 1995). Using the statements adapted by Eys and colleagues (2005), athletes responded to each statement using a 9-point Likert-type scale ranging from 1 (*completely uncertain*) to 9 (*completely certain*). These statements include, "I intend to play this sport next season", "I intend to play this sport at the same competitive level next season", and "I intend to play this sport with the same team next season". Utilization of these statements is important because it gives a broader view of athletes' perspective to wanting to play for the same team again, rather than just asking a single question of whether they would like to return to the sport, as was utilized by Spink (1995). Additional questions related to the athletes' intentions to play with the same peer leader and would want to play with them as their formal leader again.

2.3 Procedures

Following approval from the University Research Ethics Board (REB# 4189; see Appendix G), various community youth sport teams in Southern Ontario were contacted. Potential team information was gathered from team websites. If there was no direct coach email, then league management was contacted to notify them of the study and obtain contact information of competitive sport coaches (see Appendix H). However, if coaches emails were



available on league websites then they were contacted via e-mail directly by the researcher (see Appendix I), and a time was scheduled to attend the team practice of interested coaches. This study consisted of collecting data at two time periods. Originally it was hoped that Time 1 would be within the first 4 weeks of the beginning of the competitive season and Time 2 within the last 4 weeks of the competitive season. However, due to a number of scheduling conflicts and delays in response, there were a few teams that did not undertake the first data collection until close to the middle of the season. As well, when corresponding with the coaches, it needed to be ensured that team captains had been selected on the team before Time 1. Again, a couple of teams did not select their captains until closer to the middle of the season. For those teams where Time 1 was not until later in the season, their second data collection was scheduled for as close to the end of their season as possible to try to maintain a relatively equivalent time period between collections. The vast majority of data collections occurred 3 months apart, however, 2 teams data collections occurred 2 months apart (2 months and 2 days and 2 months and 18 days), while another 2 teams had collection times 4 months apart. At the end of Time 1, coaches were asked when their season would be finished and when a good time would be to contact them for the second data collection. Around the time indicated by the coach, emails were sent to coordinate a time for the second data collection. For the majority of the teams, Time 2 occurred during their playoff schedule. The one exception was the basketball team, which needed to be collected just past the middle of their season so that it could be included in the data analysis. However, the first data collection was conducted before their regular season had started so it is believed that enough time had passed.

For the majority of the teams, data collection occurred before a team practice. As some of the players were under the age 16 years, parental consent forms were sent to the coaches prior to data collection to have parents sign (see Appendix J and K). Signed parental consent letters were



obtained from underage athletes on the day of data collection, prior to participation. Athletes were given information letters and informed consent (see Appendix L and M), as well as the questionnaire package. After filling in the demographic information and leadership inventory athletes created a unique code based on their gender (i.e., F or M), birth date (i.e., YYYYMMDD), and jersey number (e.g., F199602247) which they filled in on all subsequent questionnaires in order to maintain their anonymity, and so responses could be matched and compared across the two data collection points. Two time points were selected for data collection so that there could be a longitudinal component to this study to assess if certain behaviours changed over time. Coaches were also given a letter of information and consent form (Appendix N and O) to sign at Time 1 for their participation at Time 2.

At the time of data collection, athletes were advised that (a) their responses would be kept strictly confidential and (b) there were no right or wrong answers. However, it was stressed to the athletes to fill out the questionnaires based on the leadership behaviours displayed by their current team captain. Team captains were asked to complete the questionnaire based on one of their assistant captains. As well, the ringette teams consisted of two or three team captains so players were asked to complete the questionnaire based on one of the team captains, and to indicate which captain they had selected by writing the jersey number of that captain on the top of the page. Ringette captains were advised to complete the questionnaire based on the other team captain, and again indicated that captain's jersey number on the top of the page.

At Times 1 and 2 the questionnaire package included the MLQ-5X and the trust inventory (Appendix B and D), while at Time 2 the package also included the intention to return questionnaire (Appendix F). Athletes only completed the demographic and leadership inventory at Time 1. However, if they were new participants at Time 2, consent was obtained and they



completed the entire questionnaire package (i.e., demographics, leadership inventory, MLQ-5X, trust scale, and intentions to return). At both time points, questionnaires were distributed to each athlete in an individual envelope and were returned to the researcher in the envelope once completed. This was done to maintain confidentiality of the responses. At Time 2, coaches were asked to indicate the overall performance level of each athlete throughout the season, compared to other players in their division, and how the individual performed compared to their original expectations that they had for them (Appendix E). At the end of the competitive season the team's winning percentage, or ranking, was gathered from team records to get a sense of the overall team performance. On each consent form participants were able to provide their contact information so that the researcher could send them general results of the study once completed.

2.4 Data Analyses

All data were inputted into SPSS, which was used to conduct the data analysis. When data were being inputted, any questions that the athlete failed to complete were listed as '999' to indicate a missing value. Descriptive statistics were created for the demographic and leadership inventory results of all participants. To maintain similarities across both time points it was decided that all further analysis would be completed with only those participants who were present at both time points. Therefore, all participants who were not present for both collections were removed. Exploratory analysis of the data was then completed to determine if there were any outliers and to check if assumptions were met. Analysis of z-scores indicated that there were 13 outliers present. By completing a sensitivity analysis of the data both with and without outliers present, it was found that there were minor differences in the results. Data were then analyzed by winsorizing the outliers (i.e., outliers were adjusted to the nearest value within 3 standard deviations; Field, 2013) and it was found to be an appropriate solution to dealing with



the outliers. All other assumptions appeared to be met, although there did appear to be slight skewness and kurtosis to some of the questions of the MLQ-5X.

Reliability analyses were run on the raw data of the MLQ-5X and the trust inventory to check for the reliability of the scales. After reliability scores were obtained, scale values were computed by SPSS by adding the raw scores for each scale and then dividing the total by the number of items in each scale. If there was a missing value in the raw scores, the scale value was computed by hand. If at least 50% of the values were present a score would be computed, otherwise a missing values of '999' would be input for that participant's scale value. There were few instances of missing data, and no participants were removed due to a large quantity of data missing.

Once all participants scale values were computed, correlations were run to determine if significant relationships were present. Following that, linear regressions were run to test the study hypotheses. Regressions for the full range model were conducted as a hierarchical multiple regression, with the first step including perceptions of laissez-faire only, the second step including contingent reward perceptions, and the third model included all of the full range leadership behaviours. Behaviours were inputted this way to measure what is considered least effective leadership to most effective leadership, and to determine if the transformational leadership behaviours. Tests to confirm if linear regression assumptions were met were run and supported further analyses (i.e., linearity, normality, multicollinearity, and homoscedasticity). For the purpose of this study, only the intentions to return questions that pertained to the current team and peer leader (i.e., Questions 3, 4, and 5) were analyzed as the intentions to return variables. Finally, separate repeated-measures MANOVA were conducted on



the full range leadership behaviours and the trust scales to determine if there were any significant differences between these scores from Time 1 to Time 2.

Chapter 3: Results

Although data were collected at two time periods, which would allow for a longitudinal analysis of the predictive nature of these leadership behaviours, the hypotheses were completed as a cross-sectional analysis using Time 1 and Time 2 data separately. This was done because it allowed for a better understanding of the research question, and so that overall relationships at the beginning and end of the season could be compared.

3.1 Reliability Analysis

A reliability analysis was run on the raw data of the MLQ-5X and trust inventory (see Tables 3 and 4). Results of the trust inventory indicate acceptable reliability at both time points $(\alpha = .77 - .89)$. However, the reliability of the MLQ-5X was lacking on a couple of scales. The scales of passive MBE and active MBE were low at both time points ($\alpha = .57$ and .67; $\alpha = .70$ and .64 respectively). While the reliability for active MBE was acceptable at Time 1, it decreased at Time 2 and so it was decided that these two scales would be removed from further analysis. Although Cronbach's alpha (Cronbach, 1951) levels similar to these have been used in previous studies (e.g., Charbonneau et al., 2001), it was decided that to maintain the integrity of the study results it would be best to remove these scales. Furthermore, while there were additional scales with a lower than preferable Cronbach's alpha level at Time 1, these levels all increased to acceptable levels at Time 2. As well, removing these two scales still allowed for the ability to analyze the results based of the Full Range Leadership Model, as there was still a transactional and passive/avoidant scale present. It is assumed that some of the low and inconsistent Cronbach's alpha values could be due to the instability of the MLQ-5X with the younger population, in that this population did not truly comprehend some of the questions that they were answering.



3.2 Descriptive Statistics

Descriptive statistics for demographic information can be found on Table 1. In total there were 180 participants after the second data collection. These participants included 111 females and 69 males, with a mean age of 15.59 years (SD = 1.31). Data were collected from competitive hockey (n = 128), ringette (n = 42), and basketball (n = 10) teams. These athletes were on their current team for an average of 3.04 years (SD = 2.52) and played at the competitive level for an average of 6.45 years (SD = 2.35).

Results of the leadership inventory indicate that 64% of the athletes acted as a captain on a previous competitive sport team, 7% were currently the captain on their team, and 16% were assistant captains on their current team. Furthermore, 37% of the athletes consider themselves to be leaders on their team, while 49% consider themselves to be leaders at times. Captains on these teams were selected by the coach 48% of the time, 16% by athletes, and 36% by both coach and athlete input. Athletes indicated that they agreed with their team's form of leadership selection 84% of the time. In terms of whom the athletes look to most for leadership, 72% indicated that the team captain was the leader that they looked to most.¹

Athletes were asked to rank from 1-7 (1 being the most important), qualities that they perceive to be important in a leader (see Figure 2). Results indicate that athletes perceive motivation (M = 2.65, SD = 1.67) to be the most important quality in a leader, whereas ability (M = 5.38, SD = 1.60) was ranked as the least important quality. However, when examined by

¹ An analysis of the leadership inventory results of the 126 athletes who were present at both time points was run with similar results found. See Table 2 and Figure 3 for results.



gender there are some differences that emerge. For females, motivation (M = 2.55, SD = 1.59) and ability (M = 5.55, SD = 1.55) remain the top and bottom qualities, however for males it is work ethic (M = 2.74, SD = 1.75) and charisma (M = 5.38, SD = 1.71) that are the highest and lowest rated qualities in a leader. For the quality of friendliness, females ranked it as the second most important quality in a leader (M = 3.18, SD = 1.87), whereas males ranked it as the fifth most important quality (M = 4.33, SD = 1.93). The quality of interest for this study, trust, was ranked as fourth most important by males (M = 3.80, SD = 1.70), and fifth by females (M = 4.18, SD = 1.78).

While descriptive statistics for demographics and leadership inventory results were run on all study participants, the remainder of the analysis was conducted on responses from the 126 participants who were present at both time points. This included 77 females and 49 males with a mean age of 15.49 years (SD = 1.26), who had played on their current team for an average number of 2.98 years (SD = 2.43).

A repeated measures MANOVA was conducted to determine if athletes' perceptions of leadership behaviours and trust changed from Time 1 to Time 2 (see Table 3). Results indicate that there was no significant difference between either cognitive- or affect-based trust from Time 1 to Time 2. However, there were differences in most of the full range leadership behaviours. In particular, laissez-faire, F(1, 124) = 14.31, p <.001, contingent reward, F(1, 124) = 21.15, p <.001, intellectual stimulation, F(1, 124) = 11.96, p =.001, idealized influence (behaviour), F(1, 124) = 9.90, p =.002, and individualized consideration, F(1, 124) = 12.72, p =.001, all significantly increased over the season.



3.3 Correlations

There were many significant relationships that emerged from the data. Correlations for Time 1 study variables can be found on Table 4 and for Time 2 on Table 5. At both Time 1 and Time 2, all of the full range leadership behaviours were significantly correlated to cognitive- and affect-based trust, and all were positively correlated except laissez-faire, which was negatively correlated to both forms of trust. The same pattern was seen for the leadership behaviours and the leadership outcomes (i.e., effectiveness, extra effort, and satisfaction). At Time 2, athletes' intentions to return to the team if it had the same captain and to join another team with the captain if asked were positively related to all of the transformational leadership behaviours, whereas just their intentions to return to the team (without the primer of the same team captain) was positively related to all transformational leadership behaviours except intellectual stimulation and individualized consideration. For the performance variables at Time 2, coaches' performance rating of athletes and his/her expectation for the athlete were only positively related to contingent reward, r(124) = .18, p = .047; r(123) = .18, p = .042, and idealized influence (behaviour), r(124) = .24, p = .006; r(123) = .22, p = .015. However, the team's overall performance was significantly positively related to a number of leadership behaviours [contingent reward, r(126) = .20, p = .024, idealized influence (attributed), r(126) = .26, p = .26, .003, inspirational motivation, r(126) = .23, p = .009, leader effectiveness, r(126) = .22, p = .02, p = .012], trust [cognitive-based trust, r(126) = .28, p = .002, and affect-based trust, r(126) = .28, p = .002, and affect-based trust, r(126) = .28, p = .002, and affect-based trust, r(126) = .28, p = .002, and affect-based trust, r(126) = .28, p = .002, and affect-based trust, r(126) = .28, p = .002, and affect-based trust, r(126) = .28, p = .002, and affect-based trust, r(126) = .28, p = .002, and affect-based trust, r(126) = .28, p = .002, p = .002.25, p = .004], as well as positive outcomes [extra effort, r(126) = .22, p = .016, the athletes' intentions to return to the team the following season, r(126) = .21, p = .018, and to return with the same team captain, r(126) = .22, p = .014]. It is important to note that while these performance p values indicate statistical significance, their r values indicate that it is a low



correlation (i.e., 0.2-0.39; Safrit & Wood, 1995). Therefore, it is possible that the large sample size is artificially inflating the p values to be statistically significant, when in fact the relationships are weak to non-existent (Zhu, 2012).

3.4 H1: Full Range Leadership Behaviours and Trust

Results indicate that the full range leadership behaviours were significantly related to both cognitive- and affect-based trust at the beginning and end of the season. At Time 1, the full range behaviours that significantly contributed to the relationship with affect-based trust, $R_{adj}^2 =$.48, F(7,117) = 7.36, p < .001, were laissez-faire ($\beta = -.15$), inspirational motivation ($\beta = .25$), and idealized influence (attributed) ($\beta = .35$). These behaviours also significantly contributed to the relationship at Time 2, $R_{adj}^2 = .52$, F(7,117) = 8.69, p < .001 ($\beta = -.13$, .22, and .43 respectively). The full range leadership behaviours that contributed to the significant relationship with cognitive-based trust at Time 1, $R_{adj}^2 = .41$, F(7,116) = 8.48, p < .001, were intellectual stimulation ($\beta = .27$) and idealized influence (attributed) ($\beta = .60$), and at Time 2, $R_{adj}^2 = .55$, F(7,117) = 11.88, p < .001 were laissez-faire ($\beta = -.18$) and idealized influence (attributed) ($\beta = .68$).

3.5 H2: Trust and Performance

The results for trust and the performance outcomes found that there was a significant relationship between trust at Time 2 and the overall team performance, $R^2_{adj} = .07$, F(2,121) = 5.41, p = .006. It appears that it is the overall perception of trust in the leader that contributes to this relationship instead of the individual components, as neither cognitive- or affect-based trust contributed uniquely to this significant relationship. As for individual performance, no relationship was found between the coaches' ratings of individual performance and trust, or the coaches' expectations and trust.



3.6 H3: Leadership, Trust, and Positive Outcomes

The third hypothesis sought to find whether both leadership behaviours and trust had an impact on positive leadership outcomes and whether trust would be related to athletes' intentions to return to the team the following season. The positive leadership outcomes included the athletes' perceptions of the leaders' effectiveness, how satisfied they were with the leader, and whether they were willing to put in extra effort. While it was originally intended that the entire intention to return questionnaire would be included in the analyses, it was later decided once analysis began that because the purpose of the study was to assess trust in the peer leader, only those intention to return questions that pertained to the team and team captain would be analyzed.

A summary of the linear regression results for trust and leadership outcomes can be found in Table 7. Results indicate that athletes' perceptions of the peer leaders' effectiveness, athletes' willingness to put in extra effort, and satisfaction with the leader were all significantly related to trust at both the beginning and end of the season. At Time 1, for effectiveness, $R^2_{adj} = .43$, F(2,121) = 47.07, p <.001, and satisfaction, $R^2_{adj} = .34$, F(2,121) = 31.97, p <.001, it was both affect- ($\beta = .41$; $\beta = .31$) and cognitive-based trust ($\beta = .31$; $\beta = .34$) that significantly contributed to this relationship. Similarly, at Time 2, effectiveness, $R^2_{adj} = .54$, F(2,121) = 74.31, p < .001, and satisfaction, $R^2_{adj} = .60$, F(2,121) = 91.40, p <.001, were significant and again both affect- (β = .33; $\beta = .47$) and cognitive-based trust ($\beta = .47$; $\beta = .37$) contributed to the relationship. Trust was also significantly related to athletes' willingness to put in extra effort at both Time 1, $R^2_{adj} =$.32, F(2,121) = 30.40, p <.001, and Time 2, $R^2_{adj} = .46$, F(2,121) = 53.14, p <.001. However, at Time 1 it was both cognitive- ($\beta = .39$) and affect-based trust ($\beta = .24$) that contributed to the



significant relationship, whereas at Time 2 it was only affect-based trust ($\beta = .56$) that contributed to the relationship.

The leadership outcomes also had a significant relationship with the full range leadership behaviours (see Table 8). As with trust, the full range leadership behaviours were significantly related to leadership outcomes and accounted for a large amount of variance in these outcomes. The full range components that significantly contributed to leader effectiveness at Time 1, R^2_{adi} = .65, F(7,117) = 9.31, p < .001 were laissez-faire ($\beta = -.12$), intellectual stimulation ($\beta = .24$), inspirational motivation ($\beta = .18$), and idealized influence (attributed) ($\beta = .23$). The same behaviours contributed to the significant relationship at Time 2, $R^2_{adj} = .66$, F(7,118) = 8.76, p <.001, except contingent reward ($\beta = .19$) was a significant contributor and inspirational motivation was not. For athletes' willingness to put in extra effort, it was related to the full range leadership behaviours at both Time 1, $R_{adj}^2 = .59$, F(7,117) = 5.99, p < .001, and at Time 2, R_{adj}^2 = .57, F(7,118) = 7.96, p < .001. There were two behaviours that were constant contributors to this relationship at both time points: intellectual stimulation ($\beta = .30$; $\beta = .32$) and idealized influence (attributed) ($\beta = .21$; $\beta = .21$). At Time 1 there was an additional significant contributor of contingent reward ($\beta = .30$). Finally, the full range behaviours were related to athletes' satisfaction with the leader at Time 1, $R^2_{adj} = .54$, F(7,116) = 6.90, p < .001, and at Time 2, R^2_{adj} = .68, F(7,118) = 16.75, p < .001. Again, the significant contributors were laissez-faire ($\beta = -.26$; $\beta = -.14$) and idealized influence (attributed) ($\beta = .31$; $\beta = .57$). At Time 1 intellectual stimulation $(\beta = .22)$ was also significant.

Lastly, athletes' intentions to return were assessed based on their trust in their current team captain. It was found that trust was significantly related to athletes' intentions to return to the team the following season, $R^2_{adj} = .13$, F(2,120) = 9.89, p < .001, however when breaking it



down to cognitive- and affect-based trust, neither emerged as a unique significant contributor to this relationship. When being more specific and asking athletes' if they would return to the team if it had the same team captain, trust again was significant, $R^2_{adj} = .17$, F(2,125) = 12.92, p < .001. Here it was cognitive-based trust ($\beta = .32$) that contributed significantly to this relationship. Cognitive-based trust ($\beta = .27$) was also the significant contributor in the relationship between trust and whether the athlete would join another team with the captain if they asked them, $R^2_{adj} = .14$, F(2,120) = 11.00, p < .001. These relationships were all based on the athletes' trust in the peer leader at the end of the season.



	Affect- based Trust (AT)	Cognitive- based Trust (CT)	Effectiveness (E)	Extra Effort (EE)	Satisfaction (S)	IR4	IR5
Laissez-faire (LF)	- AT (1)		- E (1)		-S (1)	N/A	N/A
	- AT (2)	- CT (2)	- E (2)		-S (2)		
Contingent Reward (CR)			+E (2)	+EE (1)		N/A	N/A
Intellectual Stimulation (IS)		+ CT (1)	+ E (1)	+ EE (1)	+S (1)	N/A	N/A
			+ E (2)	+EE (2)			
Idealized influence (attributed) (IIA)	+ AT (1)	+ CT (1)	+ E (1)	+ EE (1)	+ S (1)	N/A	N/A
	+ AT (2)	+ CT (2)	+ E (2)	+ EE (2)	+ S (2)		
Idealized influence (behaviour) (IIB)						N/A	N/A
Inspirational Motivation (IM)	+ AT (1)		+E (1)			N/A	N/A
	+ AT (2)						
Individualized Consideration (IC)						N/A	N/A
Cognitive-based Trust (CT)			+ E (1)	+ EE (1)	+ S (1)	N/A + IR4 (2)	N/A
			+ E (2)	(-)	+ S(2)		+ IR5 (2)
Affect-based Trust (AT)			+ E (1)	+ EE (1)	+ S (1)	N/A	N/A
			+ E (2)	+ EE (2)	+ S (2)		

Summary of Significant Regression Relationships

NOTE: Bracket indicates time point; N/A indicates that the regression was not run on that variable (i.e., IR variables were only run on trust at Time 2); IR4 = I intend to play with the same team if it has the same team captain next season, IR 5 = I would accept an offer to join another team with the team captain if asked



Chapter 4: Discussion

The results found in this study lead to the suggestion that there are many benefits that emerge when youth peer leaders use transformational leadership behaviours. The current study was able to replicate results and expand on previous literature on leadership and trust, and the results provided support for hypotheses 1 and 3, and partial support for hypothesis 2. The following sections in this chapter will (a) provide an interpretation of the study findings, (b) discuss potential limitations of the study and future directions, and (c) offer practical implications of the current findings.

4.1 Interpretation of findings

Results from the leadership inventory are, for the most part, consistent with previous literature. The majority of athletes (72%) indicated that the team captain was the leader that they looked to most for leadership, however 27% indicated that it was not. This result supports Northouse's (2007) proposition that sometimes a formal leader is not the most influential member of the group. This statistic also suggests that not all members on the team will view the leader the same way, and that it is the individual experience and perception that ultimately determines the impact of the leader (Shields et al., 1997). For instance, there was a team where the majority of the athletes perceived the leader to be a good leader and looked to her most for leadership; however, there was also a group of athletes on that team who perceived the captain to be a poor leader. In fact, one athlete even added a note at the end of the questionnaire saying that the captain only communicated with the older players on the team, and not with the younger ones.

The results of the number of formal and informal leaders on a team are also consistent with previous findings, in that there are more informal leaders than formal leaders on a sport



team (Loughead et al., 2006), and that the majority of the team consider themselves to be leaders (Crozier et al., 2013). Results of the current study found that 86% of the athletes consider themselves to be leaders at least sometimes. It is important to note that this figure is an overall view of the participant's perception of his or her own leadership, and is not broken down by team (i.e., it is not to say that 86% of the team is composed of informal leaders). This figure is just to show that the vast majority of the athlete participants believe that they display some type of leadership behaviour, and furthers the notion by Loughead and colleagues (2006) that while all members on the team have the ability to lead, not all will. Fourteen percent of the athletes surveyed in this study did not consider themselves to be leaders in any capacity.

The results of what athletes consider to be important qualities in a leader is interesting because the highest ranked quality was that the leader be motivational. In a recent study by Fransen and colleagues (2014), it was proposed that motivation should be added as a function of leadership, along with task, social, and external functions. Furthermore, they found that athletes considered motivation to be the second most important function of a leader, behind only task functions. The results of the current study further the idea that athletes value a leader who can motivate them, and that it is a highly important quality of a leader (Dupuis et al., 2006; Holmes et al., 2010). On the flip side, athletes ranked ability as the least important quality in a leader. This is in contrast to Glenn and Horn (1993) and Moran and Weiss (2006), who found that athletes perceived skill ranking to be the most important quality in a leader. However, those studies also found that athletes did not consider skill to be an important factor in their own leadership abilities, and so the results of the current study would be in line with these results. The current study asked athletes to rank the qualities in terms of leaders in general, and not specific to the skills of their current team leader, so it is possible that they viewed their own leadership skills



as part of their rationale in ranking the qualities. When separating these results between males and females, it was found that females ranked friendliness much higher than males, which is opposite to what was found by Moran and Weiss (2006). Interestingly, in their study males ranked friendliness as the second most important quality in a peer leader, whereas females ranked it as the second least important quality. In the current study it was females who ranked friendliness as the second most important quality in a leader, while males ranked it as the third least important quality.

It is important to note that while charisma was ranked as one of the least important qualities, there were some participants who did not understand what this quality meant. Although explanations were given when asked, it is assumed that some of the participants did not understand what this quality was, and perhaps it would have been ranked higher if athletes were fully aware of its meaning. It may have been beneficial to add a small definition to the inventory, or to choose a different word all together. As for trust, it was ranked in the middle of the qualities, although it was ranked slightly higher by males than females. In interviews with student athletes, Holmes and colleagues (2010) found that both males and females cited trustworthiness as an important quality in a leader. While the athletes in the current study did not rank trust as the most important quality in a leader, from the results of the regression analysis it appears that trust was an important contributor to athletes' perception of leader effectiveness, satisfaction, and their willingness to put in extra effort, as trust accounted for between 32% to 60% of the variance in these leadership outcomes. It is also important to note that when ranking the leadership qualities, athletes were asked to use each number only once so ties in rankings could not occur. This was done so that the athletes would have to make a decision as to which



qualities were more or less important to them. However, for this reason, interpretations of the relative importance of the various qualities could not be made.

When assessing whether perceptions of leadership behaviours or trust had changed from the beginning of the season to the end, it was interesting that both forms of trust did not change significantly. This suggests that youth athletes' trust in their peer leader is relatively stable throughout the season. For the full range leadership components, the means indicate that perceptions of all of the components increased significantly throughout the season, except idealized influence (attributed) and inspirational motivation. Therefore, as both these behaviours did not significantly change it suggests that these two behaviours may be the most stable of the full range components. The rest of the full range behaviours all significantly increased over the season, which means that perhaps athlete leaders were engaging in more of these leadership behaviours throughout the season. Research on leadership training by Bass and Avolio (1990) found that over six months to two years after training, modest improvements in the use of transformational leadership were seen, especially in leadership components that participants planned to improve. While the current study did not implement a training protocol, it may be possible that team captains who completed the survey at the beginning of the season internalized some of the questions of the MLQ-5X and purposely tried to implement some of the behaviours. Furthermore, for the behaviours that did not significantly change, it appears that there may have been a ceiling effect that occurred. The Time 1 means for cognitive- and affect-based trust (6.10 and 5.72, respectively) were both close to the maximum rating of 7, as were both idealized influence (attribute) (3.05) and inspirational motivation (3.07) to their maximum rating of 4.

The first study hypothesis looked to determine if peer leaders' use of the full range leadership behaviours would be related to team members' trust in that leader. Specifically, it was



hypothesized that peer leaders' use of transformational leadership would be related to a greater level of trust in the leader. Results provide support for this hypothesis, and align with previous literature that has found trust to be a major outcome of transformational leadership (Bass & Riggio, 2006; Burke et al., 2007; Dirks & Ferrin, 2002; Schaubroeck et al., 2011). Using hierarchical multiple regression analyses it was found that both affect- and cognitive-based trust significantly related to the full range of leadership components at both the beginning and end of the season. In fact, the full range of leadership accounted for 48% of the variance explained in affect-based trust and 41% of the variance explained in cognitive-based trust at Time 1. This variance explained was further increased to 52% and 55% at Time 2, respectively. This suggests that these behaviours have a meaningful impact on whether youth athletes will trust their leader or not. Interestingly, the specific behaviours that significantly contributed to affect-based trust at Time 1 were also significant at Time 2 as well. These behaviours include greater idealized influence (attributed), inspirational motivation, and lower laissez-faire behaviours. This suggests the relationship between these behaviours and affect-based trust was stable over the course of the season. It is important to note that as expected, idealized influence (attributed) significantly contributed to each of the relationships with trust, which indicates that idealized influence (attributed) may be the most influential predictor for trust in a peer leader. This makes sense as leaders who are perceived to have idealized influence demonstrate high standards so followers trust and respect them (Bass, 1985; Bass & Riggio, 2006). It is interesting, however, that idealized influence (behaviour) did not also emerge as a significant component in this relationship. Perhaps it is the inference made about the leader's confidence and values, rather than the actual behaviours witnessed by the athlete that builds their trust in the leader. Idealized influence (attributed) was moderately highly correlated with both forms of trust at both times



points, which is somewhat concerning as perhaps they are measuring a similar concept. However, this seems unlikely as the correlations did not exceed r = .71, and the correlation between cognitive- and affect-based trust with idealized influence (behaviour) was only moderate.

The results of the study provided partial support for the second hypothesis, in that trust in the leader would be related to performance. While the regression analysis was not significant for trust at Time 2 and individual performance or expectations, there was a significant relationship with the team's overall performance, similar to what was found in Dirks (2000). In both studies it appears that trust in both the coach and team captain are linked with the team's overall performance. However, as trust only accounted for 7% of variance in the overall team performance, trust in the team captain does not appear to have a great impact on the team's performance. Additional variables that may have a greater impact on performance include cohesion and self-talk (Carron, Colman, Wheeler, & Steven, 2002; Hatzigeorgiadis, Zourbanos, Galanis, & Theodorakis, 2011). For example, Carron and colleagues (2002) completed a meta-analysis of the research on cohesion and performance in sport and they concluded that overall, effect sizes indicate a moderate to large relationship between cohesion and performance.

It was hypothesized that increased trust would be related to an increase in individual performance based on results from the organization literature that states that when there is trust in the leader, one is able to perform more effectively because he or she has confidence in the leader's ability (Schaubroek et al., 2011). While this may be the case in businesses, it appears to not carry over to the youth sport setting. However, perhaps with a different measure of individual performance results would vary. For example, instead of having the coach complete one survey of the athletes' overall performance at the end of the season, they could complete it more often



(e.g., after every game or every few games/weeks). This may be difficult as it would require more participation from the coaches, but it would allow for a more reliable measure of individual performance, and it would provide insight into changes in performance throughout the season. Furthermore, instead of having coaches' rate athletes' overall performance on a scale from 1-9, it could be broken down into skill performance based on the athletes' position. Future studies would have to assess if these different measures would add anything to the relationship.

Finally, support was found for hypothesis 3 (i.e., full range leadership/trust and positive outcomes). Results demonstrate that athlete leaders' use of transformational leadership behaviours, and in particular idealized influence (attributed), intellectual stimulation, and inspirational motivation, may be associated with athletes perceiving the leader as more effective, being willing to put in extra effort, and perceiving greater satisfaction with the leader. These results align with the findings of Zacharatos and colleagues (2000), who also found that adolescent peer leaders' use of transformational leadership behaviours lead to an increase in athletes' perceptions of leader effectiveness, satisfaction with the leader, and extra effort. Furthermore, similar results were seen by Rowold (2006) in martial arts coach leadership. However, he found that individualized consideration, and not intellectual stimulation led to these leadership outcomes. This suggests that idealized influence (attributed) and inspirational motivation are both important transformational leadership behaviours to be used by both coach and peer leaders. As well, similar to Loughead and Hardy (2005), who found that coach and peer leaders may be responsible for different leadership functions, the results of the current study suggest that it may be more important for coaches to display individualized consideration, while more important for peer leaders to be intellectually stimulating. For individualized consideration, the leader strives to improve the followers' development (Bass, 1999), which is similar to the



leadership behaviour of training and instruction that research suggests is more of a coaches' responsibility (Loughead & Hardy, 2005). Thus, differences between coach and peer leadership may be apparent across the full range of behaviours (i.e., transactional and transformational).

Furthermore, the transactional behaviour contingent reward also emerged as a significant contributor to the relationship with extra effort at Time 1 and effectiveness at Time 2, while laissez-faire behaviours were negatively related to extra effort, effectiveness, and satisfaction. Therefore, while transformational leadership appears to be most effective, use of transactional behaviours could also be beneficial at times, but laissez-faire behaviours appear to be negative overall. The results support Bass' (1985) notion that while transformational leadership is the most effective form of leadership, leaders must also use transactional behaviours at times, as it can also be a somewhat effective form of leadership. Additionally, he concluded that laissez-fare behaviours were the least effective form of leadership. While laissez-faire has consistently been found to be an ineffective style of leadership, it may be beneficial for future sport research to differentiate between laissez-faire behaviours (i.e., being absent when needed) and autonomy supportive behaviours (i.e., allowing followers to make their own decisions), which the MLQ-5X does not currently assess.

The positive leadership outcomes were also perceived to be greater when the athletes had high cognitive- and affect-based trust in the leader. This is not surprising, as the same transformational leadership behaviours that were found to lead to positive leadership outcomes were also the transformational behaviours that led to an increase in cognitive- and affect-based trust. Furthermore, there have been a number of previous studies that have found that trust in the leader is related to a number of positive outcomes such as organizational citizenship behaviours, psychological well-being, and a positive attitude and behaviours (Dirks & Ferrin, 2002;



Kelloway et al., 2012; Podsakoff et al., 1990). As for the intentions to return findings, it appears that trust in the team captain is somewhat important in youth athletes' intentions to return to the team the following season. This is especially true if the athlete has high cognitive-based trust in his or her team captain. Therefore, it appears to be more of the perception of the leader's skills or competence that will draw a youth athlete back to playing with the same team captain, rather than their emotional connectedness to them. While previous literature has not yet considered how an athletes' trust in their peer leader can impact their intentions to return to the team the following season, lack of trust in senior leaders has been cited as a reason why employees leave their job (Yazinski, 2009). It has been suggested that fostering trust and confidence in senior leaders is a way to increase employee retention, and from the results of the current study it appears that trust in the peer leader may have the ability to increase retention on sport teams.

This study was able to support the literature that shows that the use of transformational leadership is related to a number of positive outcomes (Bass et al., 2003; Price & Weiss, 2013; Schaubroeck et al., 2011; Smith et al., 2013; etc.). Throughout the analyses of the full range leadership hypotheses there were a number of components that consistently emerged as significant contributors to the relationships. In particular, the transformational component of idealized influence (attributed) was significant for every relationship (i.e., both cognitive- and affect-based trust as well as all of the positive leadership outcomes). This suggests that idealized influence (attributed) may be the most important leadership behaviour for youth sport peer leaders. From the results it would appear that the second greatest transformational component for youth leaders to display would be intellectual stimulation. While this component was only a significant contributor to trust through cognitive-based trust at Time 1, it was a significant contributor to all of the positive leadership outcomes at both time points, except satisfaction at



Time 2. However, just as important as it may be for leaders to have idealized influence (attributed) and intellectual stimulation, it may be equally as important for leaders to avoid being perceived as laissez-faire. This full range leadership component significantly contributed negatively to all of the above relationships except cognitive-based trust at Time 1 and extra effort. Taken together, the results of the regression analyses suggest that it is beneficial for youth peer leaders to be confident and act in a way that others will respect them, seek differing perspectives when solving problems, and to avoid being perceived as absent when needed and not willing to make decisions when necessary.

While many of the transformational leadership components were found to contribute to trust in the leader, as well as positive leadership outcomes, there were two transformational components, idealized influence (behaviour) and individualized consideration, that did not significantly contribute to any of the study relationships. It is interesting that idealized influence (attributed) was found to be such an important transformational leadership component, whereas the second aspect, idealized influence (behaviour), was not. Furthermore, these components both represent charismatic leadership, which the athletes ranked as a leadership behaviour of low importance to them. It is assumed that when completing the leadership quality rankings, the athletes did not fully understand what the word 'charismatic' meant, as idealized influence (attributed) is attributing these charismatic qualities to the leader (Bass & Avolio, 2004). The major difference between these two components is that idealized influence (attributed) is the socialized charisma of the leader, and the attributions followers give to the leader, whereas idealized influence (behaviour) is the charismatic actions of the leader and if he or she discusses his or her values and beliefs (i.e., how the follower feels about the leader vs. what they see the leader doing; Antonakis et al., 2003). Perhaps at the youth sport level, seeing the team captain



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talk about their morals and values may not be important to developing one's overall impression of him or her, but what really matters is perceiving him or her as being confident and respecting him or her.

Somewhat surprising is that individualized consideration was not a significant predictor of affect-based trust, as it is thought that transformational leaders elicit trust from their followers because of their higher-quality relationships (Dirks & Ferrin, 2002). However, even though it did not come through as significant in the regression analysis, it was highly correlated with both cognitive- and affect-based trust at both time points. This suggests that even though it is related to both forms of trust, the other behaviours account for more variance within the relationship so it is not able to come through as significant in the multiple regression analysis. Furthermore, perhaps it is just that feeling as though one is an individual, or treated differently from the group, is not as important on youth sport teams. Future research will have to determine if this is indeed the case.

4.2 Limitations and Future Directions

There were a number of potential limitations to this study. One limitation was with the use of the MLQ-5X. When administering the questionnaire there was a question that was supposed to be seen as a positive behaviour (i.e., individualized consideration: treats me as an individual rather than a member of the group), however athletes may have perceived this as a negative behaviour. There was one instant where an athlete asked the researcher if being treated as an individual was a bad thing because it would mean they treat people on the team differently. This is perhaps why individualized consideration did not emerge as a significant contributor to trust or positive outcomes in the regression analyses. Furthermore, it is unknown to the researcher if this was a common theme with athletes in that they interpreted some questions as



being negative (or positive) when it is intended to mean the opposite. Therefore, perhaps there is an issue for the youth sporting context in how some of the questions are written, and may account for some of the low alpha levels.

As well, some questions may have been answered negatively because the athlete felt that the team captain did not need to fulfill a certain role (i.e., the peer leader does not effectively represent their needs to the coach because that player can represent themselves). Furthermore, one issue with using youth as participants is that some had difficulties understanding some of the language used. This was particularly seen in the leadership inventory where participants did not know what charismatic meant, and could account for why it was ranked as a least important quality. To try to account for this the researcher was available for word clarification when needed, however it is unknown if some participants answered questions without understanding the meaning. As well with youth athletes, as with all participants, it is possible that they rushed through the questionnaire without fully reading the questions, although the expected theoretical relationship emerged so it does not appear that this was a major issue.

Another limitation to this study is that while the researcher hoped to achieve an equal balance of males and females in the study, this could not be achieved. Furthermore, there were a large number of participants from hockey and ringette teams, but only one basketball team was able to be recruited. So while there were three sports represented, results may be more generalizable to hockey and ringette teams rather than basketball teams. Furthermore, while participant data were analyzed only if they were present at both data collections to ensure that participant characteristics were the same at both time points, this may introduce a potential bias. It is possible that the participants who attended both time points could have different characteristics than the participants who only attended one time point (e.g., higher levels of



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motivation). As well, although most data collections occurred within the same time frame, there were a couple of teams that had either a shorter or longer period between collections. Therefore, it is possible that this variation may have had an impact on the results, in that teams with data collections further apart could have more knowledge of their leaders' behaviour than those with shorter times between collections.

There may also be an issue with how the athlete leaders were identified. Athletes were asked to complete the questionnaires based on their current team captain, however, based on the leadership inventory about a quarter of the athletes did not look to this captain as their main leader on the team. Furthermore, the coach most often selected the captain, so perhaps the leader that the athlete was evaluating was not the leader that they wanted or looked to for leadership. However, it was done this way so that each athlete would be evaluating the same leader, and so there would be variability in athletes' perceptions of the leader. What may be more of a concern is that the majority of athletes had acted as a captain on a previous team, so their responses may have been influenced by this prior experience. This is because athletes who previously acted as captains would have more knowledge of what it is like to be a team captain or empathy for them, and as such evaluate the current captain easier than other athletes who were not captains previously.

Lastly, the current study did not take into account the coach's transformational leadership, which may have acted as a confounding variable. It is possible that (1) athletes were completing the questionnaire based upon leadership of the coach, rather than the team captain, or (2) the leadership values of the coach were influencing the leadership behaviour of the athlete, so it was not actually the peer leader that they were trusting but instead was a reflection of the trust instilled by the coach's behaviour. Future research should include this variable to determine if



peer transformational leadership is related to trust and positive outcomes over and above that of the coach's transformational leadership.

While there are some potential limitations to the current study, the results are promising and can provide a starting point for many future research studies. As it was found that youth peer leaders' use of transformational leadership is linked to many positive outcomes, researchers should look at programs to teach youth to develop these leadership skills. Research by Gould and Voelker (2012) suggests that youth cannot learn leadership skills just by participating in sport. Therefore, youth sport organizations should implement leadership programs at a young age for all youth to develop transformational leadership skills. It would be beneficial for researchers to study age appropriate leadership training techniques so that leadership training could be implemented at all youth levels.

To account for some of the limitations of the current study, future studies should use other leadership questionnaires to see if similar results are found. While this study wanted to analyze the full range of leadership behaviours, there are other questionnaires (i.e., Differentiated Transformational Leadership Inventory for Youth Sport; Vella et al., 2012) that could be utilized to research transformational and transactional leadership. However, perhaps to research the full range of leadership behaviours at the youth sport level, a version of the MLQ needs to be developed for this population. While this is not to say that the current version of the MLQ-5X was totally inappropriate for this population, research with this population has been increasing so it may be beneficial to develop a more age appropriate tool for them. As well, there appears to be a need to run a factor analysis on the MLQ-5X to ensure that the questions are appropriately measuring the correct theoretical concepts. Particularly, if there is a need for idealized influence to be separated into attributed and behaviour scales, or whether it is measuring the same thing.



Future research should study different sports, such as soccer or baseball, and get a larger sample of basketball athletes. As the data collection for the current study was done during the winter months, data could only be collected from certain sports. Therefore it would be worthwhile to investigate if the same results emerge in different sports. Furthermore, there are sports with different team structures (i.e., Ultimate Frisbee), where the team captain also acts as the coach, so they have more input on task decisions meaning their leadership behaviours may be more important indicators of team members' trust in them, and trust may be more influential for positive outcomes. It would also be interesting to study how trust in the team captain relates to other sport outcomes such as group cohesion, or to run a qualitative study with athletes to get a more in-depth understanding of trust. Finally, as this researcher was able to find relationships between transformational leadership, trust, and positive outcomes, future analyses should determine if trust acts as a mediator in this relationship.

4.4 Practical Implications

The results of the current study provide insight into the importance of youth leadership on sport teams. In particular, transformational leadership of youth athletes is associated with a number of positive outcomes. These leaders may not only bring out higher levels of trust from their teammates, but they may also be perceived by their teammates as being an effective and satisfying leader, and athletes may be more willing to put in extra effort for these leaders. This increased trust is also related to athletes having greater intentions to return to the same team with that team captain the following season. With all of these positive outcomes, it could lead to teams staying intact for more seasons, which could potentially lead to better team cohesion and greater team performance. Therefore, coaches should take time to teach athletes on their team how to be transformational leaders. They can do this by teaching them what it means to be a



transformational leader, and encouraging athletes to have a strong work ethic, to be confident and motivational, and most importantly they can display transformational behaviours themselves so that the athletes have a role model to want to emulate (Bass & Riggio, 2006; Burns, 1978).

Based on the results of the leadership inventory, it appears that the majority of athletes believe that they display leadership at times. This implies that it would be beneficial for not only a select few to learn how to be transformational leaders, but for every member of the team to learn these skills. Having the capability to be a transformational leader is an essential skill, not only on sport teams, but also in the real world once these athletes have careers (Gould & Voelker, 2012), so teaching all athletes how to be transformational leaders could have a lasting effect on their lives.

While teaching athletes how to be transformational leaders may be essential, it is possible that some transformational components may be more influential than others. Based on the results of the current study, it appears that idealized influence (attributed) may be linked to the most positive outcomes. Therefore, it may be most important for coaches to choose a leader who goes beyond their own self-interest for the good of the group, and who are confident and act in appropriate ways so that team members respect them (Bass & Avolio, 2004). Furthermore, it may be just as important for coaches to teach their captains and assistants to avoid being perceived as being a laissez-faire leader. Coaches can do this by ensuring that peer leaders are not absent when needed, don't avoid making decisions, and don't avoid helping to resolve important team issues (Bass & Avolio, 2004).

Another important finding from the current study is that athletes value leaders who are motivational, have good work ethic, and good communication skills. They also believe that an athletes' athletic ability is not the highest priority in terms of what makes them a good leader.



This is not the first study that has shown that athletes value leadership characteristics other than athletic ability (Dupuis et al., 2006; Holmes et al., 2008; Holmes et al., 2010). Together with the advice provided above, it would be wise for coaches to not select captains based solely on their athletic ability, but instead take into consideration other leadership behaviours, such as their work ethic, which could provide insight into their ability to be a transformational leader.



Chapter 5: Conclusion

The purpose of the current study was to determine if the use of the full range of leadership behaviours by youth peer leaders would be related to an increased level of trust from team members, and if both the use of full range leadership and trust would be related to positive outcomes. Results of the current study indicate that athlete leaders' use of transformational leadership is related to higher levels of trust at both the beginning and end of the season. Furthermore, athlete leaders who are perceived to display laissez-faire behaviours are related to lower levels of trust. These components were also related to athletes' perceptions of the leader's effectiveness, their satisfaction with the leader, and athletes' willingness to put in extra effort. These positive leadership outcomes were also linked to levels of trust in the peer leader, as was the athlete's willingness to return to the team the following season with the same team captain.

There were transformational components that emerged from the results as being potential behaviours of great importance to the study outcomes. These include idealized influence (attributed), inspirational motivation, and intellectual stimulation. Surprisingly, individualized consideration and idealized influence (behaviour) did not emerge as significant in any of the regression analyses.

The current study was able to extend the research by Dirks (2000) and other leadership and trust literature by not only finding that trust in the peer leader is linked to the team's overall winning percentage, but that youth peer leaders' use of transformational leadership behaviours is related to trust from teammates, and both trust and transformational leadership are related to positive outcomes. Importantly, these benefits of transformational leadership were shown over and above transactional and non-leadership behaviours. These results suggest that it is important for youth athletes to learn how to be transformational leaders.



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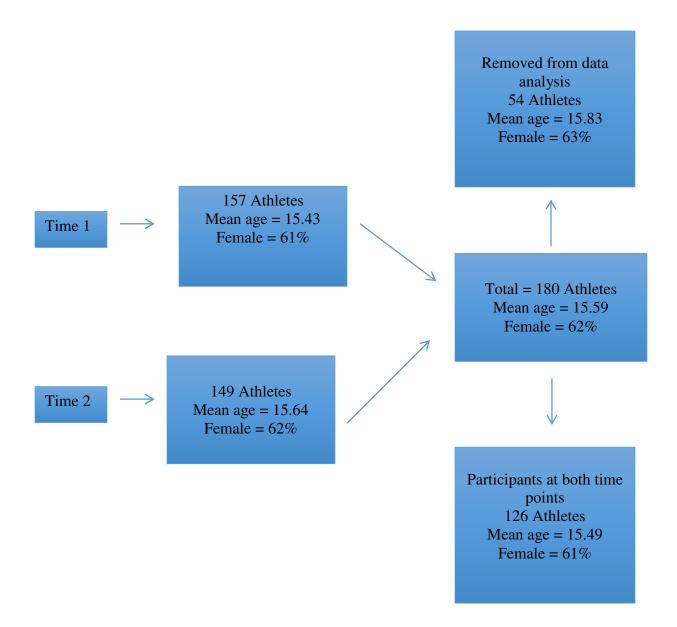


Figure 1. Flow Chart of Participant Data Collection



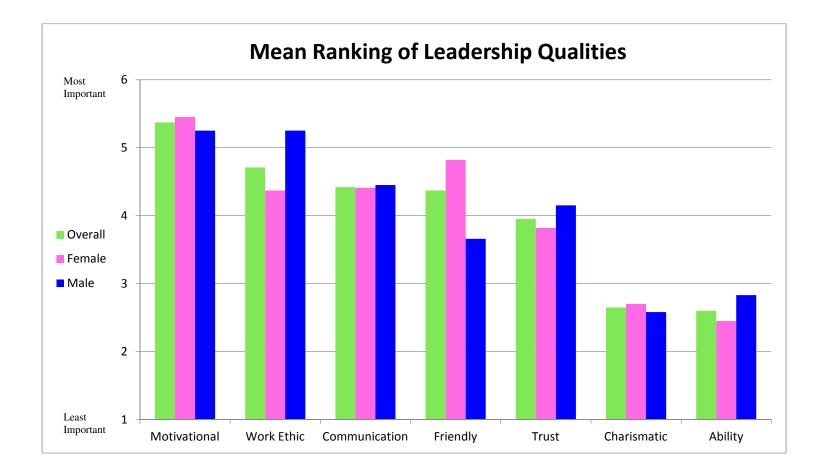


Figure 2. Important Qualities in a Leader (N = 168)



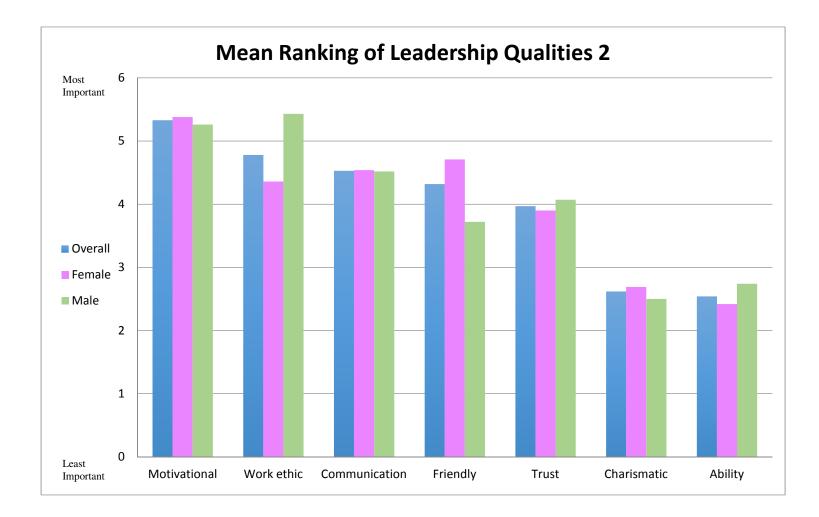


Figure 3. Important Qualities in a Leader (N = 118)



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Participant Demographics

Demographic Variable	Time 1	Time 2	Participants present at both Time points	Participants present at only one Time point
Gender	95 female, 62 male	93 female, 56 male	77 female, 49 male	34 female, 20 male
Age (years)	M = 15.43 (<i>SD</i> = 1.17)	M = 15.64 (<i>SD</i> = 1.39)	M = 15.49 (<i>SD</i> = 1.26)	M = 15.83 (SD = 1.38)
Sport (<i>n</i>)	Hockey (112)	Hockey (108)	Hockey (92)	Hockey (36)
	Ringette (37)	Ringette (34)	Ringette (29)	Ringette (13)
	Basketball (8)	Basketball (7)	Basketball (5)	Basketball (5)
Team tenure (years)	M = 3.04 (<i>SD</i> = 2.44)	M = 2.99 (SD = 2.53)	M = 2.98 (<i>SD</i> = 2.43)	M = 3.19 (SD = 2.72)
Number of year playing at the competitive level	M = 6.40 (SD = 2.31)	M = 6.33 (SD = 2.20)	M = 6.42 (SD = 2.33)	M = 6.54 (SD = 2.45)



Leadership Inventory Results (N = 126)

Variable	Percentage (%)
Previously team captain	66
Current team captain	10
Current assistant captain	18
Consider themself as a leader	35
Consider themself as a leader at times	49
Look to captain most for leadership	74
Team captain selected by coach	52
Team captain selected by athletes	15
Team captain selected by both coach and athlete	32
Agree with form of leader selection	84



PEER TRANSFORMATIONAL LEADERSHIP AND TRUST

Table 3

Repeated Measures MANOVA of Changes from Time 1 to Time 2

Measure	Ν	Time 1 mean (SD)	Time 2 mean (SD)	F	Р
Cognitive-based Trust	123	6.10 (.78)	5.99 (.94)	2.48	.117
Affect-based Trust	123	5.72 (1.23)	5.83 (1.21)	1.64	.202
Laissez-faire	125	.84 (.74)	1.11 (.91)	14.30	< .001
Contingent Reward	125	2.31 (.80)	2.61 (.80)	21.15	< .001
Intellectual Stimulation	125	2.31 (.84)	2.55 (.80)	11.96	.001
Idealized Influence (attributed)	125	3.05 (.69)	3.04 (.73)	.01	.934
Idealized influence (behaviour)	125	2.38 (.81)	2.62 (.73)	9.90	.002
Inspirational Motivation	125	3.07 (.68)	3.13 (.66)	1.30	.257
Individualized Consideration	125	2.18 (.90)	2.45 (.92)	12.72	.001

Divariale	Correlation	ns ana Ke		oejjičienis	Time I							
Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. LF	.61											
2. CR	04	.68										
3. IS	18*	.71**	.76									
4. IIB	07	.67**	.58**	.71								
5. IM	24**	.57**	.46**	.66**	.69							
6. IIA	27**	.64**	.53**	.58**	.67**	.71						
7. IC	.02	.71**	.72**	.56**	.47**	.58**	.65					
8. E	28**	.69**	.68**	.60**	.64**	.70**	.63**	.68				
9. EE	22*	.69**	.69**	.49**	.49**	.62**	.63**	.78**	.84			
10. S	38**	.56**	.61**	.49**	.50**	.64**	.56**	.70**	.66**	.65		
11. AT	32**	.51**	.45**	.47**	.60**	.65**	.45**	.62**	.50**	.53**	.77	
12. CT	32**	.39**	.41**	.31**	.44**	.62**	.30**	.59**	.55**	.54**	.66**	.85

Bivariate Correlations and Reliability Coefficients Time 1

** p < .001, *p < .05

NOTE: Italicized values indicate cronbach's alpha values

LF = Laissez-faire, CR = Contingent reward, IS = Intellectual stimulation, IIB = Idealized influence (behaviour), IM = Inspirational motivation, IIA = Idealized influence (attributed), IC = Individualized consideration, E = Effectiveness, EE = Extra effort, S = Satisfaction, AT = Affect-based trust, CT = Cognitive-based trust

Bivariate Correlations and Reliability Coefficients Time 2

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. LF	.77																	
2. CR	14	.77																
3. IS	18*	.75**	.75															
4. IIB	13	.65**	.69**	.71														
5. IIA	30**	.72**	.69**	.62**	.78													
6. IM	33**	.56**	.57**	.64**	.66**	.72												
7. IC	21*	.81**	.77**	.70**	.78**	.59**	.74											
8. E	34**	.71**	.71**	.64**	.74**	.64**	.72**	.75										
9. EE	22*	.66**	.71**	.57**	.69**	.57**	.69**	.77**	.76									
10. S	37**	.63**	.62**	.60**	.81**	.65**	.67**	.74**	.68**	.77								
11. CT	39**	.50**	.46**	.47**	.71**	.58**	.49**	.71**	.57**	.70**	.85							
12. AT	36**	.55**	.52**	.49**	.70**	.61**	.60**	.67**	.68**	.73**	.73**	.89						
13. IR 3	10	.17	.16	.23*	.21*	.35**	.15	.35**	.26**	.25**	.35**	.35**	-					
14. IR 4	08	.25**	.25**	.28**	.32**	.37**	.22*	.42**	.33**	.30**	.40**	.38**	.85**	-				
15. IR 5	03	.33**	.27**	.30**	.34**	.24**	.29**	.35**	.30**	.24**	.38**	.35**	.51**	.62**	-			
16. CPR	.04	.18*	.15	.24**	.13	.05	.14	.15	.14	.07	.09	.13	08	02	02	-		
17. CE	01	.18*	.09	.22*	.15	.10	.17	.11	.11	.11	.10	.13	04	.03	.07	.72**	-	
18. TP	10	.20*	.14	.04	.26**	.23**	.06	.22*	.22*	.15	.28**	.25**	.21*	.22*	.15	.12	.07	-

** *p* < .001, * *p* < .05

NOTE: Italicized values indicate cronbach's alpha values

LF = Laissez-faire, CR = Contingent reward, IS = Intellectual stimulation, IIB = Idealized influence (behaviour), IIA = Idealized influence (attributed), IM = Inspirational motivation, IC = Individualized consideration, E = Effectiveness, EE = Extra effort, S = Satisfaction, CT = Cognitive-based trust, AT = Affect-based trust, IR 3 = I intend to play this sport with the same team next season, IR 4 = I intend to play with the same team if it has the same team captain next season, IR 5 = I would accept an offer to join another team with the team captain if asked, CPR = Coach performance rating, CE = Coach expectation, TP = Team performance

Summary of Regression Analysis for Leadership Behaviours and Trust

Variables		(Cognitive-	based Tr	ust		Affect-based Trust					
		Time 1	-		Time 2			Time 1			Time 2	
	B	SE B	β	В	SE B	β	В	SE B	β	В	SE B	β
Laissez-faire	11	.08	10	19	.07	18*	26	.12	15*	18	.09	13*
Contingent Reward	001	.12	001	.11	.13	.09	.14	.18	.09	.09	.17	.06
Inspirational Motivation	.08	.12	.07	.19	.13	.14	.45	.18	.25*	.40	.17	.23*
Individualized Consideration	18	.10	20	24	.13	23	.06	.15	.04	.12	.17	.09
Idealized influence (behaviour)	13	.10	13	.13	.13	.10	02	.15	02	02	.17	01
Idealized influence (attributed)	.69	.12	.60**	.86	.14	.68**	.62	.18	.35*	.72	.18	.44**
Intellectual Stimulation	.25	.11	.27*	09	.12	08	.05	.16	.04	07	.16	04
$R^2_{\rm adj}$			41			54			.48			52
F		8.4	48**		11.	88**		7.	36**		8.6	9**

** p < .001, * p < .05

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Table 7

Summary of Regression Analysis for Trust and Leadership Outcomes

					Time 1					Time 2								
Variable	E	ffective	ness	E	Extra Eff	ort	S	atisfacti	on	E	ffective	ness]	Extra Ef	fort		Satisfact	tion
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	ß
Cognitive trust	.30	.09	.31*	.52	.13	.39**	.39	.11	.34*	.39	.07	.47**	.17	.10	.16	.37	.08	.37**
Affect trust	.25	.06	.41**	.20	.08	.24*	.23	.07	.31*	.21	.06	.33**	.45	.08	.56**	.36	.07	.47**
R^2_{adj}		.43			.32			.34			.54			.46			.60	
F		47.07*	*		30.40**	*		31.97*	*		74.31*	*		53.14*	*		91.40*	*

** p < .001, * p < .05



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Measure	t	р	β	F	df	р	R^2_{adj}
Effectiveness Ti	me 1						
Overall model				9.32	7,117	<.001	.65
LF	-1.98	.050	12				
IS	2.71	.008	.24				
IM	2.15	.033	.18				
IIA	2.76	.007	.23				
Effectiveness Ti	me 2						
Overall model				8.76	7,118	<.001	.66
LF	-2.58	.011	15				
CR	1.99	.049	.19				
IS	2.11	.037	.19				
IIA	2.46	.015	.23				
Extra Effort Tim	ne 1						
Overall model				5.99	7,117	<.001	.59
CR	2.96	.004	.30				
IS	3.16	.002	.30				
IIA	2.30	.024	.21				
Extra Effort Tim	ne 2						
Overall model				7.96	7,118	<.001	.57
IS	3.13	.002	.32				
IIA	2.02	.045	.12				
Satisfaction Tim	e 1						
Overall model				6.90	7,116	<.001	.54
LF	-3.74	<.001	26				
IS	2.16	.033	.22				
IIA	3.25	.002	.31				
Satisfaction Tim	e 2						
Overall model				16.75	7,118	<.001	.68
LF	-2.54	.013	14				
IIA	6.23	<.001	.57				

Summary of Regression Analysis of Full Range Leadership Behaviours and Outcomes

NOTE: LF = Laissez-faire, CR = Contingent reward, IS = Intellectual stimulation, IIA = Idealized influence (attributed), IM = Inspirational motivation



Appendix A: Demographic Questionnaire



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Athlete Leaders' use of Transformational Behaviours and its Effect on Trust in the Leader and Individual Outcomes. Lead researcher: Amy Cubitt Supervisor: Mark Eys, PhD

The following form will collect individual information to be used in the current study, and therefore it is important to fill in all blanks.

Date of Birth:	Year	Month	Day	
Male Fem	ale			
Uniform Numb	er:			
Current team: _				
Experience play	ying the current spor	rt (in years): Rep: _	Hou	ise league:
Additional com	petitive sport(s) tha	t you have played:		
Were you a form	nal team leader [cap	otain or assistant c Yes		ny of these teams?
Number of year	rs playing on your cu	irrent team:		
Are you current	tly a formal leader (d	captain or assistan	t captain) on th	nis team?
		Captain	Assistant	Neither
Do you conside	r yourself to be a lea	der on this team?		
		Yes	No	Sometimes



Is the team captain the teammate you look to most for leadership?

Yes _____ No _____

How was the team captain on your current team selected?

Coach _____ Athletes _____ Both _____

Do you agree with this form of team captain selection?

Yes _____ No _____

Please rate in order of importance the qualities that you look for in a team captain in general (i.e., does not need to be qualities that your current team captain possesses):

[1 (most important) – 7 (least important) Please use each number only once]

Friendly_____Motivational_____Ability_____Trustworthy_____Good communication skills_____Strong work ethic_____Charismatic_____



Appendix B: Leadership

Multifactor Leadership Questionnaire – Form 5x

Participant ID (GenderYYYYMMDDJerseyNumber): _____

This questionnaire is used to describe the leadership style of your team captain as you perceive it (If you are the current team captain please fill out this questionnaire based on the leadership style of the assistant captain). Please ensure that you answer the following questions based on your experience with this individual only. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank. Please judge how frequently each statement fits the person you are describing, using the following rating scale.

Not at	all Once in a while	Sometimes		Frequently, if not always
0	1	2	3	4
My team	a captain Provides me with assistance in ex-	change for my eff	orts	
2.				
3.	-			
4.	·	-		s from standards 0 1 2 3 4
5.				
6.				
7.	Is absent when needed			
8.	Seeks differing perspectives when	solving problems	5	
9.	Talks optimistically about the futu	ıre		
10.	Instills pride in me for being assoc	ciated with him/he	er	
11.	Discusses in specific terms who is	s responsible for a	chieving performan	ace goals 0 1 2 3 4
12.	Waits for things to go wrong befo	re taking action		
13.	Talks enthusiastically about what	needs to be accon	nplished	
14.	Specifies the importance of havin	g a strong sense of	f purpose	
15.	Spends Time teaching and coachi	ng		0 1 2 3 4
16.	Makes clear what one can expect	to receive when p	erformance goals a	re achieved 0 1 2 3 4
17.	Shows that he/she is a firm believ	er in ''If it ain't br	oke, don't fix it"	
18.	Goes beyond self-interest for the	good of the group		
19.	Treats me as an individual rather	han just as a mem	ber of the group	
20.	Demonstrates that problems must	be chronic before	taking action	
21.	Acts in ways that builds my respe	ct		
22.	Concentrates his/her full attention	on dealing with r	nistakes, complaint	s, and failures 0 1 2 3 4



Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4
23. Considers the	moral and ethical conseque	nces of decisions		
24. Keeps track of	all game-related mistakes.			0 1 2 3 4
25. Displays a sen	se of power and confidence	;		0 1 2 3 4
26. Articulates a c	ompelling vision of the futu	ure		0 1 2 3 4
27. Directs my atte	ention towards failures to n	neet standards		
28. Avoids making	g decisions			
29. Considers me	as having different needs, a	bilities, and aspirat	ions from others	
30. Gets me to loo	ok at problems from many d	ifferent angles		0 1 2 3 4
31. Helps me to de	evelop my strengths			
32. Suggests new	ways of looking at how to c	complete game-relation	ted tasks	0 1 2 3 4
33. Delays respond	ding to urgent questions			
34. Emphasizes th	e importance of having a co	ollective sense of a	goal	
35. Expresses satis	sfaction when I meet expec	tations		0 1 2 3 4
36. Expresses cont	fidence that goals will be ad	chieved		0 1 2 3 4
37. Is effective in	meeting my sport-related ne	eeds		
38. Uses methods	of leadership that are satisf	ying		
39. Gets me to do	more than I expected to do			
40. Is effective in	representing me to higher a	uthority (i.e., the co	oach)	
41. Works with me	e in a satisfying way			
42. Heightens my	desire to succeed			
43. Is effective in	meeting team requirements			
44. Increases my v	willingness to try harder			
45. Leads a group	that is effective			

*Transformational – Idealized Influence (Attributed): 10,18,21,25

- -- Idealized Influence (Behaviour): 6,14,23,34
- -- Inspirational Motivation: 9,13,26,36
- -- Intellectual Stimulation: 2,8,30,32
- -- Individualized Consideration: 15,19,29,31

*Transactional – Contingent Reward: 1,11,16,35

- -- Management by Exception (Active): 4,22,24,27
- *Passive/Avoidant Management by Exception (Passive): 3,12,17,20
 - -- Laissez-Faire: 5,7,28,33
- *Outcomes Extra Effort: 39,42,44
 - -- Effectiveness: 37,40,43,45
 - -- Satisfaction: 38,41



Appendix C: MLQ-5X Permission



To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material for his/her research:

Instrument: Multifactor Leadership Questionnaire Authors: Bruce Avolio and Bernard Bass Copyright: 1995 by Bruce Avolio and Bernard Bass

Five sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any published material.

Sincerely,

Robert Most

Mind Garden, Inc.

www.mindgarden.com

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Appendix D: Trust Scale

Measurement Scale for Trust in Leadership

Participant ID (GenderYYYYMMDDJerseyNumber): _____

This questionnaire is used to describe your trust in your team captain as you perceive it. (If you are the current team captain please fill out this questionnaire based on your trust in the assistant captain). Please ensure that you answer the following questions based on your experience with this individual only. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank. Please judge how frequently each statement fits the person you are describing, using the following rating scale.

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7
1. Mo	st team member	rs trust and respe	ct this peer lea	der		
1	2	3	4	5	6	7
	in talk freely to t he/she will wa	this peer leader a nt to listen	bout difficulti	es I am having o	on the team a	and know
1	2	3	4	5	6	7
	share my proble caringly	ems with this pee	er leader, I kno	w he/she would	l respond con	nstructively
1	2	3	4	5	6	7
	ave a sharing rel hopes with him	ationship with th n/her	is peer leader,	I can freely sha	are my ideas,	feelings,
1	2	3	4	5	6	7
5. I w	ould feel a sense	e of loss if this p	eer leader left 1	to play on anoth	er team	
1	2	3	4	5	6	7



Stron Disag	. .	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree		
1	2	3	4	5	6	7		
6. This peer leader approaches his/her job with professionalism and dedication								
1	2	3	4	5	6	7		
7.	Given this peer lea	der's past perform	mance, I see n	o reason to doub	t his/her cor	npetence		
1	2	3	4	5	6	7		
8.	I can rely on this p leadership	eer leader not to	make my job ((as a player) mor	e difficult b	y poor		
1	2	3	4	5	6	7		
9. Other players and coaches consider this peer leader to be trustworthy								
1	2	3	4	5	6	7		
*Cognitive-based Trust: 1.6.7.8.9								

*Cognitive-based Trust: 1,6,7,8,9 *Affect-based Trust: 2,3,4,5



Appendix E: Performance Athlete Performance Rating Scale

Team Name: _____

Please rate each player in terms of their overall performance throughout the season, and how they performed compared to your original expectations for them.

Jersey Number	Po	or	Excellent								
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
<u> </u>	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
<u> </u>	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
<u> </u>	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
<u> </u>	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
<u> </u>	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
<u> </u>	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
<u> </u>	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW
	1	2	3	4	5	6	7	8	ABOVE	MET	BELOW

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Appendix F: Intentions to Return Intentions to Return Questionnaire

Participant ID (GenderYYYYMMDDJerseyNumber):

The following questionnaire has a number of statements regarding your intentions to play the same sport next season. Please read each statement carefully and circle the number that you feel best represents your intentions.

1. I intend to play this sport next season.

1	2	3	4	5	6	7	8	9
Do not agre	e			Undecided			Co	mpletely Agree
2. I ir	ntend to pl	ay this spor	t at the sa	me compet	itive level	next seaso	n.	
1	2	3	4	5	6	7	8	9
Do not agre	e			Undecided			Co	mpletely Agree
3. I intend to play this sport with the same team next season.								
1	2	3	4	5	6	7	8	9
Do not agre	e			Undecided			Co	mpletely Agree
4. I ir	ntend to re	turn to this	team next	t season if t	he same te	am captain	is on the	team.
1	2	3	4	5	6	7	8	9
Do not agre	e			Undecided			Co	mpletely Agree
5. If my team captain asked me to join a team with them I would accept this offer.								
1	2	3	4	5	6	7	8	9
Do not agre	e			Undecided			Co	mpletely Agree



6. I would return to this team next season only if it had a different team captain.

1	2	3	4	5	6	7	8	9
Do not agr	ee			Undecided			Сог	npletely Agree
7. If	possible, I	would like	to be the	team captai	in next sea	son.		
1	2	3	4	5	6	7	8	9
Do not agree				Undecided			Cor	npletely Agree



Appendix G: REB Approval

September 26, 2014

Dear Amy,

REB # 4189 Project, "Athlete leaders' use of transformational behaviours and its effect on trust in the leader and individual outcomes." Expiry / End Date: August 31, 2015

The Research Ethics Board of Wilfrid Laurier University has reviewed the above proposal and determined that the proposal is ethically sound. If the research plan and methods should change in a way that may bring into question the project's adherence to acceptable ethical norms, please submit a "Request for Ethics Clearance of a Revision or Modification" form for approval before the changes are put into place. This form can also be used to extend protocols past their expiry date, except in cases where the project is more than two years old. Those projects require a new REB application.

Please note that you are responsible for obtaining any further approvals that might be required to complete your project.

If any participants in your research project have a negative experience (either physical, psychological or emotional) you are required to submit an "Adverse Events Form" within 24 hours of the event.

You must complete the online "Annual/Final Progress Report on Human Research Projects" form annually and upon completion of the project. ROMEO will automatically keeps track of these annual reports for you. When you have a report due within 30 days (and/or an overdue report) it will be listed under the 'My Reminders' quick link on your ROMEO home screen; the number in brackets next to 'My Reminders' will tell you how many reports need to be submitted.

All the best for the successful completion of your project.

(Useful links: ROMEO Login Screen ; ROMEO Quick Reference Guide ; REB webpage)

Yours sincerely.



Robert Basso, PhD Chair, University Research Ethics Board Wilfrid Laurier University

/pb



Appendix H: Recruitment Script for League Management

Founded 1911

Letter of Information Athlete Leaders' use of Transformational Behaviours and its Effect on Trust in the Leader and Individual Outcomes. Lead researcher: Amy Cubitt Supervisor: Mark Eys, PhD

Dear (insert name here),

My name is Amy Cubitt and I am a graduate student at Wilfrid Laurier University working with the supervision of Dr. Mark Eys, Associate Professor in the Departments of Kinesiology/Physical Education and Psychology, with a specific interest in sport psychology. I am currently conducting research on athlete leadership on competitive sport teams. More specifically, I am exploring how athlete leaders' specific leadership behaviours described as being 'transformational' influence teammates' shared trust and personal experiences within sport teams. This research will generate a better understanding of how peer leaders' (e.g., team captains) influence their teammates' experiences.

Results of this study will benefit coaches and athletes as it will investigate whether leaders who display specific behaviours will lead to additional positive outcomes for the individual players and team in general. Positive leadership behaviours are important skills to be developed, and trust in the leader may be just as important for competitive teams to be successful.



This study consists of a survey that will be completed by 170 male and female competitive athletes from various sport teams across Southern Ontario. Participants must be aged 16 or older. To conduct the study, we are asking clubs and organizations involved for support in regard to passing along information about the study to team coaches. I am contacting you, as a youth sport organization, for your club's approval and support in contacting coaches about this study. For teams who are interested in inviting us to a team practice, athletes will be invited to participate in a study that includes completing a questionnaire package at two time points, once within the first 4 weeks of the season and again within the last 4 weeks of the season. It is expected that the letter of consent and questionnaire package will take approximately 25 minutes for athletes to fill out.

Participation in the study is completely voluntary, and athletes may decline to participate without penalty. If they do decide to participate, they may withdraw from the study at any time without penalty. A summary of the final results will also be made available upon request to athletes, coaches, and clubs.

This research is being conducted within the guidelines of the Wilfrid Laurier University Research Ethics Board, and if at any Time athletes are not being treated appropriately, or rights as a participant are being violated in any fashion, you are welcome to contact Dr. Robert Basso, Chair of the University Research Ethics Board (REB# 4189), at (519) 884-0710 extension 4994 or via email at rbasso@wlu.ca.

Your Time in considering my research is much appreciated, and I look forward to hearing from you soon. If requested, I would be glad to provide further information and a more in-depth explanation of the research at a Time and location that is convenient for you.



Take care,

Amy Cubitt MSc(c), BA

Group Dynamics and Physical Activity Lab

Department of Kinesiology & Physical Education Wilfrid Laurier University Waterloo, ON (519) 884-0710 ext. 3691



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Appendix I: Recruitment Script for Coaches

Wilfrid Laurier University

Founded 1911

Letter of Information Athlete Leaders' use of Transformational Behaviours and its Effect on Trust in the Leader and Individual Outcomes. Lead researcher: Amy Cubitt Supervisor: Mark Eys, PhD

Dear (insert name here),

My name is Amy Cubitt and I am a graduate student at Wilfrid Laurier University working with the supervision of Dr. Mark Eys, Associate Professor in the Departments of Kinesiology/Physical Education and Psychology, with a specific interest in sport psychology. I am currently conducting research on athlete leadership on competitive sport teams. More specifically, I am exploring how athlete leaders' specific leadership behaviours described as being 'transformational' influence teammates' shared trust and personal experiences within sport teams. This research will generate a better understanding of how peer leaders' (e.g., team captains) influence their teammates' experiences.

Results of this study will benefit coaches and athletes as it will investigate whether leaders who display specific behaviours will lead to additional positive outcomes for the individual players and team in general. Positive leadership behaviours are important skills to be developed, and trust in the leader may be just as important for competitive teams to be successful.



This study consists of a survey that will be completed by 170 male and female competitive athletes from various sport teams across Southern Ontario, as well as a minimum of 17 coaches from the same teams. Participants must be aged 16 or older. I am contacting you, as a youth sport coach, for your approval and support in recruiting athletes on your team to participate in this study. For teams who are interested in inviting us to a team practice, athletes will be invited to participate in a study that includes completing a questionnaire package at two Time points, once within the first 4 weeks of the season and again within the last 4 weeks of the season. It is expected that the letter of consent and questionnaire package will take approximately 25 minutes for athletes to fill out. As the team coach I will be asking that you fill out an athlete performance scale at the season and how it compared to your original expectations for them. The letter of consent and performance scale will take coaches 10-15 minutes to complete.

Participation in the study is completely voluntary, and athletes may decline to participate without penalty. If they do decide to participate, they may withdraw from the study at any Time without penalty. A summary of the final results will also be made available upon request to athletes, coaches, and clubs.

This research is being conducted within the guidelines of the Wilfrid Laurier University Research Ethics Board, and if at any Time athletes are not being treated appropriately, or rights as a participant are being violated in any fashion, you are welcome to contact Dr. Robert Basso, Chair of the University Research Ethics Board (REB# 4189), at (519) 884-0710 extension 4994 or via email at rbasso@wlu.ca.



Your Time in considering my research is much appreciated, and I look forward to hearing from you soon. If requested, I would be glad to provide further information and a more in-depth explanation of the research at a Time and location that is convenient for you.

If you would like your team to participate in the research project, please contact Amy Cubitt by e-mail at <u>cubi0790@mylaurier.ca</u>.

Take care,

Amy Cubitt MSc(c), BA

Group Dynamics and Physical Activity Lab Department of Kinesiology & Physical Education Wilfrid Laurier University Waterloo, ON (519) 884-0710 ext. 3691



Appendix J: Letter of Information – Parents

Wilfrid Laurier University

Founded 1911

Letter of Information Athlete Leaders' use of Transformational Behaviours and its Effect on Trust in the Leader and Individual Outcomes. Lead researcher: Amy Cubitt Supervisor: Mark Eys, PhD

Your child is invited to participate in a research study. The purpose of the present study is to examine trust in peer leadership in sport teams. Recent investigations regarding the topic of trust in leadership in sport have demonstrated that trust in the leader can influence a team's success. However, currently there is minimal to no understanding as to the leadership behaviours that lead to trust in the leader. This research study is being conducted by Amy Cubitt (M.Sc. candidate, Department of Kinesiology/Physical Education) and Mark Eys (PhD, Departments of Kinesiology/Physical Education and Psychology).

INFORMATION

Your child's participation in this study involves reading this informed consent statement (5 minutes) and filling out a brief questionnaire package (15-20 minutes) designed to gather your child's perceptions of their team leaders in general, along with their personal experiences of sport. The study involves two data collection Time points, once at the beginning of the season (within the first four weeks) and again at the end of the season (within the last four weeks). Overall, approximately 20-25 minutes of your child's Time will be needed two Times after a weekly practice at the beginning and end of the season. Approximately 170 athletes in total will be asked to take part in this study. In addition, your child's team coach will be providing general information on your child's overall performance throughout the season.

<u>RISKS</u>

There are minimal psychological or emotional risks associated with this study including boredom, and confusion; each of which will be minimized to the best of the researchers' ability. Your child's information will remain confidential and his/her real name or team will not be used at any Time during the communication of results. In addition there are no anticipated physiological risks. Please feel free to contact the WLU research office (see contact information below) in the event that you have concerns/questions.

BENEFITS

The present study aims to better understand the ways in which group dynamics and leadership influence experiences in team sport. The benefits of this study are theoretical and applied in nature, however the findings will also provide a foundation for future research investigations concerning leadership behaviours and trust in peer leaders. Lastly, if you or your child wishes to obtain a summary of the final



results, you may contact the researcher or provide your contact information on the consent form (please see contact information listed below).

CONFIDENTIALITY

Several measures will be taken to ensure confidentiality of all your child's responses pertaining to the questionnaires. Each questionnaire package will be placed in individual envelopes once your child has completed it, and will not include his/her name. As well, reported results will not include any identifying information (i.e., team name). Only the researchers listed will have access to the information provided and the participant responses will be locked in a filing cabinet in a secure card access only office, and will be shredded and disposed of at the appropriate Time (i.e., 6 years) after publication of the results.

CONTACT

If you have questions at any Time about the study or the procedures (or your child experiences adverse effects as a result of participating in this study) you may contact the researchers, Amy Cubitt, MSc. Candidate Department of Kinesiology/Physical Education, Wilfrid Laurier University, Waterloo, ON, N2L 3C5, Tel: 519-884-0710 x3691, <u>cubi0790@mylaurier.ca</u>. Alternatively, you may contact Mark Eys (supervisor), Ph.D., Departments of Kinesiology/Physical Education and Psychology, Wilfrid Laurier University, Waterloo, ON, N2L 3C5, Tel: 519-884-0710 x4157, meys@wlu.ca. This project has been reviewed and approved by the University Research Ethics Board (REB# 4189). If you feel your child has not been treated according to the descriptions in this form, or their rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710, extension 4994 or <u>rbasso@wlu.ca</u>

PARTICIPATION

Participation in this study is voluntary; athletes may decline to participate without penalty. If they decide to participate, they may withdraw from the study at any Time without penalty and without loss of benefits to which they are otherwise entitled. If they withdraw from the study, every attempt will be made to remove their data from the study, and have them destroyed. They have the right to omit any question(s)/procedure(s) they choose.

FEEDBACK AND PUBLICATION

The results of this study are anticipated to be communicated at academic conferences and within written publications. If you would like a summary of the results or publications, please feel free to contact the lead researcher (Amy Cubitt; cubi0790@mylaurier.ca).



Appendix K: Informed Consent – Parents

Wilfrid Laurier University



Founded 1911

Informed Consent Athlete Leaders' use of Transformational Behaviours and its Effect on Trust in the Leader and Individual Outcomes. Lead researcher: Amy Cubitt Supervisor: Mark Eys, PhD

Your child is invited to participate in a research study. The purpose of the present study is to examine trust in peer leadership in sport teams. Recent investigations regarding the topic of trust in leadership in sport have demonstrated that trust in the leader can influence a team's success. However, currently there is minimal to no understanding as to the leadership behaviours that lead to trust in the leader. This research study is being conducted by Amy Cubitt (M.Sc. candidate, Department of Kinesiology/Physical Education) and Mark Eys (PhD, Departments of Kinesiology/Physical Education and Psychology).

INFORMATION

Your child's participation in this study involves reading this informed consent statement (5 minutes) and filling out a brief questionnaire package (15-20 minutes) designed to gather your child's perceptions of their team leaders in general, along with their personal experiences of sport. The study involves two data collection Time points, once at the beginning of the season (within the first four weeks) and again at the end of the season (within the last four weeks). Overall, approximately 20-25 minutes of your child's Time will be needed two Times after a weekly practice at the beginning and end of the season. Approximately 170 athletes in total will be asked to take part in this study. In addition, your child's team coach will be providing general information on your child's overall performance throughout the season.

<u>RISKS</u>

There are minimal psychological or emotional risks associated with this study including boredom, and confusion; each of which will be minimized to the best of the researchers' ability. Your child's information will remain confidential and his/her real name or team will not be used at any Time during the communication of results. In addition there are no anticipated physiological risks. Please feel free to contact the WLU research office (see contact information below) in the event that you have concerns/questions.

BENEFITS

The present study aims to better understand the ways in which group dynamics and leadership influence experiences in team sport. The benefits of this study are theoretical and applied in nature, however the findings will also provide a foundation for future research investigations concerning leadership behaviours and trust in peer leaders. Lastly, if you or your child wishes to obtain a summary of the final



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results, you may contact the researcher or provide your contact information on the consent form (please see contact information listed below).

CONFIDENTIALITY

Several measures will be taken to ensure confidentiality of all your child's responses pertaining to the questionnaires. Each questionnaire package will be placed in individual envelopes once your child has completed it, and will not include his/her name. As well, reported results will not include any identifying information (i.e., team name). Only the researchers listed will have access to the information provided and the participant responses will be locked in a filing cabinet in a secure card access only office, and will be shredded and disposed of at the appropriate Time (i.e., 6 years) after publication of the results.

CONTACT

If you have questions at any Time about the study or the procedures (or your child experiences adverse effects as a result of participating in this study) you may contact the researchers, Amy Cubitt, MSc. Candidate Department of Kinesiology/Physical Education, Wilfrid Laurier University, Waterloo, ON, N2L 3C5, Tel: 519-884-0710 x3691, <u>cubi0790@mylaurier.ca</u>. Alternatively, you may contact Mark Eys (supervisor), Ph.D., Departments of Kinesiology/Physical Education and Psychology, Wilfrid Laurier University, Waterloo, ON, N2L 3C5, Tel: 519-884-0710 x4157, meys@wlu.ca. This project has been reviewed and approved by the University Research Ethics Board (REB# 4189). If you feel your child has not been treated according to the descriptions in this form, or their rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710, extension 4994 or <u>rbasso@wlu.ca</u>

PARTICIPATION

Participation in this study is voluntary; athletes may decline to participate without penalty. If they decide to participate, they may withdraw from the study at any Time without penalty and without loss of benefits to which they are otherwise entitled. If they withdraw from the study, every attempt will be made to remove their data from the study, and have them destroyed. They have the right to omit any question(s)/procedure(s) they choose.

FEEDBACK AND PUBLICATION

The results of this study are anticipated to be communicated at academic conferences and within written publications. If you would like a summary of the results or publications, please feel free to contact the lead researcher (Amy Cubitt; cubi0790@mylaurier.ca).

CONSENT

"I have read and understand the above information. I have received a copy of this form. I agree to let my child participate in this study."

Parent's signature	Date
Investigator's signature	Date

If you would like to receive a general copy of the results of the study upon completion, please record your e-mail or home address here:



Appendix L: Letter of Information - Athletes

Wilfrid Laurier University



Founded 1911

Letter of Information Athlete Leaders' use of Transformational Behaviours and its Effect on Trust in the Leader and Individual Outcomes. Lead researcher: Amy Cubitt Supervisor: Mark Eys, PhD

You are invited to participate in a research study. The purpose of the present study is to examine trust in peer leadership in sport teams. Recent investigations regarding the topic of trust in leadership in sport have demonstrated that trust in the leader can influence a team's success. However, currently there is minimal to no understanding as to the leadership behaviours that lead to trust in the leader. This research study is being conducted by Amy Cubitt (M.Sc. candidate, Department of Kinesiology/Physical Education) and Mark Eys (PhD, Departments of Kinesiology/Physical Education and Psychology).

INFORMATION

Your participation in this study involves reading this informed consent statement (5 minutes) and filling out a brief questionnaire package (15-20 minutes) designed to gather your perceptions of your team leaders in general, along with your personal experiences of sport. The study involves two data collection Time points, once at the beginning of the season (within the first four weeks) and again at the end of the season (within the last four weeks). Overall, approximately 20-25 minutes of your Time will be needed two Times after a weekly practice at the beginning and end of the season. Approximately 170 athletes in total will be asked to take part in this study. In addition, your team coach will be providing general information on your overall performance throughout the season.

<u>RISKS</u>

There are minimal psychological or emotional risks associated with this study including boredom, and confusion; each of which will be minimized to the best of the researchers' ability. Your information will remain confidential and your real name or team will not be used at any Time during the communication of results. In addition there are no anticipated physiological risks. Please feel free to contact Amy Cubitt, Mark Eys, or the WLU research office (see contact information below) in the event that you have concerns/questions.

BENEFITS

The present study aims to better understand the ways in which group dynamics and leadership influence experiences in team sport. The benefits of this study are theoretical and applied in nature, however the findings will also provide a foundation for future research investigations concerning leadership behaviours and trust in peer leaders. Lastly, if you wish to obtain a summary of the final results, you may



contact the researcher or provide your contact information on the consent form (please see contact information listed below).

CONFIDENTIALITY

Several measures will be taken to ensure confidentiality of all your responses pertaining to the questionnaires. Each questionnaire package will be placed in individual envelopes once you have completed it, and will not include your name. As well, reported results will not include any identifying information (i.e., team name). Only the researchers listed will have access to the information provided and the participant responses will be locked in a filing cabinet in a secure card access only office, and will be shredded and disposed of at the appropriate Time (i.e., 6 years) after publication of the results.

CONTACT

If you have questions at any Time about the study or the procedures, (or you experience adverse effects as a result of participating in this study) you may contact the researchers, Amy Cubitt, MSc. Candidate Department of Kinesiology/Physical Education, Wilfrid Laurier University, Waterloo, ON, N2L 3C5, Tel: 519-884-0710 x3691, <u>cubi0790@mylaurier.ca</u>. Alternatively, you may contact Mark Eys (supervisor), Ph.D., Departments of Kinesiology/Physical Education and Psychology, Wilfrid Laurier University, Waterloo, ON, N2L 3C5, Tel: 519-884-0710 x4157, meys@wlu.ca. This project has been reviewed and approved by the University Research Ethics Board (REB# 4189). If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710, extension 4994 or <u>rbasso@wlu.ca</u>

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any Time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study, every attempt will be made to remove your data from the study, and have them destroyed. You have the right to omit any question(s)/procedure(s) you choose.

FEEDBACK AND PUBLICATION

The results of this study are anticipated to be communicated at academic conferences and within written publications. If you would like a summary of the results or publications, please feel free to contact the lead researcher (Amy Cubitt; cubi0790@mylaurier.ca).



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Appendix M: Informed Consent - Athletes

Wilfrid Laurier University



Founded 1911

Informed Consent Athlete Leaders' use of Transformational Behaviours and its Effect on Trust in the Leader and Individual Outcomes. Lead researcher: Amy Cubitt Supervisor: Mark Eys, PhD

You are invited to participate in a research study. The purpose of the present study is to examine trust in peer leadership in sport teams. Recent investigations regarding the topic of trust in leadership in sport have demonstrated that trust in the leader can influence a team's success. However, currently there is minimal to no understanding as to the leadership behaviours that lead to trust in the leader. This research study is being conducted by Amy Cubitt (M.Sc. candidate, Department of Kinesiology/Physical Education) and Mark Eys (PhD, Departments of Kinesiology/Physical Education and Psychology).

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Your participation in this study involves reading this informed consent statement (5 minutes) and filling out a brief questionnaire package (15-20 minutes) designed to gather your perceptions of your team leaders in general, along with your personal experiences of sport. The study involves two data collection Time points, once at the beginning of the season (within the first four weeks) and again at the end of the season (within the last four weeks). Overall, approximately 20-25 minutes of your Time will be needed two Times after a weekly practice at the beginning and end of the season. Approximately 170 athletes in total will be asked to take part in this study. In addition, your team coach will be providing general information on your overall performance throughout the season.

RISKS

There are minimal psychological or emotional risks associated with this study including boredom, and confusion; each of which will be minimized to the best of the researchers' ability. Your information will remain confidential and your real name or team will not be used at any Time during the communication of results. In addition there are no anticipated physiological risks. Please feel free to contact Amy Cubitt, Mark Eys, or the WLU research office (see contact information below) in the event that you have concerns/questions.

BENEFITS

The present study aims to better understand the ways in which group dynamics and leadership influence experiences in team sport. The benefits of this study are theoretical and applied in nature, however the findings will also provide a foundation for future research investigations concerning leadership behaviours and trust in peer leaders. Lastly, if you wish to obtain a summary of the final results, you may



contact the researcher or provide your contact information on the consent form (please see contact information listed below).

CONFIDENTIALITY

Several measures will be taken to ensure confidentiality of all your responses pertaining to the questionnaires. Each questionnaire package will be placed in individual envelopes once you have completed it, and will not include your name. As well, reported results will not include any identifying information (i.e., team name). Only the researchers listed will have access to the information provided and the participant responses will be locked in a filing cabinet in a secure card access only office, and will be shredded and disposed of at the appropriate Time (i.e., 6 years) after publication of the results.

CONTACT

If you have questions at any Time about the study or the procedures, (or you experience adverse effects as a result of participating in this study) you may contact the researchers, Amy Cubitt, MSc. Candidate Department of Kinesiology/Physical Education, Wilfrid Laurier University, Waterloo, ON, N2L 3C5, Tel: 519-884-0710 x3691, <u>cubi0790@mylaurier.ca</u>. Alternatively, you may contact Mark Eys (supervisor), Ph.D., Departments of Kinesiology/Physical Education and Psychology, Wilfrid Laurier University, Waterloo, ON, N2L 3C5, Tel: 519-884-0710 x4157, meys@wlu.ca. This project has been reviewed and approved by the University Research Ethics Board (REB# 4189). If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710, extension 4994 or <u>rbasso@wlu.ca</u>

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any Time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study, every attempt will be made to remove your data from the study, and have them destroyed. You have the right to omit any question(s)/procedure(s) you choose.

FEEDBACK AND PUBLICATION

The results of this study are anticipated to be communicated at academic conferences and within written publications. If you would like a summary of the results or publications, please feel free to contact the lead researcher (Amy Cubitt; cubi0790@mylaurier.ca).

CONSENT

"I have read and understand the above information. I have received a copy of this form. I agree to participate in this study."

Participant's signature	Date
Investigator's signature	Date

If you would like to receive a general copy of the results of the study upon completion, please record your e-mail or home address here:



Appendix N: Letter of Information - Coaches

Wilfrid Laurier University



Founded 1911

Letter of Information Athlete Leaders' use of Transformational Behaviours and its Effect on Trust in the Leader and Individual Outcomes. Lead researcher: Amy Cubitt Supervisor: Mark Eys, PhD

You are invited to participate in a research study. The purpose of the present study is to examine trust in peer leadership in sport teams. Recent investigations regarding the topic of trust in leadership in sport have demonstrated that trust in the leader can influence a team's success. However, currently there is minimal to no understanding as to the leadership behaviours that lead to trust in the leader. This research study is being conducted by Amy Cubitt (M.Sc. candidate, Department of Kinesiology/Physical Education) and Mark Eys (PhD, Departments of Kinesiology/Physical Education and Psychology).

INFORMATION

Your participation in this study involves reading this informed consent statement (5 minutes) and filling out a brief performance scale (5-10 minutes) designed to gather your perceptions of each athlete on your teams' overall performance throughout the season, and how that compared to your original expectations for them. It is expected that 17 coaches (minimum) will participate in this study. In addition, your athletes will be completing assessments of leadership behaviours, trust, and intention to return, with respect to their peer leaders and their sport experiences. Overall, approximately 10-15 minutes of your Time will be needed after a weekly practice near the end of the season.

<u>RISKS</u>

There are minimal psychological or emotional risks associated with this study including boredom and confusion; each of which will be minimized to the best of the researchers' ability. Your information will remain confidential and your real name or team will not be used at any Time during the communication of results. In addition there are no anticipated physiological risks. Please feel free to contact Amy Cubitt, Mark Eys, or the WLU research office (see contact information below) in the event that you have concerns/questions.

BENEFITS

The present study aims to better understand the ways in which group dynamics and leadership influence experiences in team sport. The benefits of this study are theoretical and applied in nature, however the findings will also provide a foundation for future research investigations concerning leadership behaviours and trust in peer leaders. Lastly, if you wish to obtain a summary of the final results, you may



contact the researcher or provide your contact information on the consent form (please see contact information listed below).

CONFIDENTIALITY

Several measures will be taken to ensure confidentiality of all your responses pertaining to the questionnaires. Each questionnaire package will be placed in individual envelopes once you have completed it, and will not include your name. As well, reported results will not include identifying information (i.e., team name). Only the researchers listed will have access to the information provided and the participant responses will be locked in a filing cabinet in a secure card access only office, and will be shredded and disposed of at the appropriate Time (i.e., 6 years) after publication of the results.

CONTACT

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FEEDBACK AND PUBLICATION

The results of this study are anticipated to be communicated at academic conferences and within written publications. If you would like a summary of the results or publications, please feel free to contact the lead researcher (Amy Cubitt; cubi0790@mylaurier.ca).



Appendix O: Informed Consent - Coaches

Wilfrid Laurier University



Founded 1911

Informed Consent Athlete Leaders' use of Transformational Behaviours and its Effect on Trust in the Leader and Individual Outcomes. Lead researcher: Amy Cubitt Supervisor: Mark Eys, PhD

You are invited to participate in a research study. The purpose of the present study is to examine trust in peer leadership in sport teams. Recent investigations regarding the topic of trust in leadership in sport have demonstrated that trust in the leader can influence a team's success. However, currently there is minimal to no understanding as to the leadership behaviours that lead to trust in the leader. This research study is being conducted by Amy Cubitt (M.Sc. candidate, Department of Kinesiology/Physical Education) and Mark Eys (PhD, Departments of Kinesiology/Physical Education and Psychology).

INFORMATION

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BENEFITS

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CONFIDENTIALITY

Several measures will be taken to ensure confidentiality of all your responses pertaining to the questionnaires. Each questionnaire package will be placed in individual envelopes once you have completed it, and will not include your name. As well, reported results will not include identifying information (i.e., team name). Only the researchers listed will have access to the information provided and the participant responses will be locked in a filing cabinet in a secure card access only office, and will be shredded and disposed of at the appropriate Time (i.e., 6 years) after publication of the results.

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FEEDBACK AND PUBLICATION

The results of this study are anticipated to be communicated at academic conferences and within written publications. If you would like a summary of the results or publications, please feel free to contact the lead researcher (Amy Cubitt; cubi0790@mylaurier.ca).

CONSENT

"I have read and understand the above information. I have received a copy of this form. I agree to participate in this study."

Participant's signature	Date	
1 0 ====		

Investigator's signature_____ Date _____

If you would like to receive a general copy of the results of the study upon completion, please record your e-mail or home address here:



Appendix P – Curriculum Vitae

Amy Cubitt	
Phone: (289) 221-4338	67 Sandlewood Court
amy.cubitt@gmail.com	Aurora, ON L4G7M9
EDUCATION	
MS Wilfrid Laurier University, Kinesiology and Physical Education	
Thesis: "Youth athlete leaders' use of transformational behaviou and relations to trust in the leader and individual outcomes"	Irs
Advisor: Dr. Mark Eys	
BS Laurentian University, Psychology	May 2011
Graduate Cum Laude	j
HONORS AND AWARDS Travel Grant	2015
SSHRC Supported Travel Grant	2013
Laurier Graduate Scholarship	2013
Laurier Graduate Scholarship	2013
Graduated Cum Laude	2011
Dean's List	2010
Dean's List	2009
CONFERENCE PRESENTATIONS	
FEPSAC, Bern, Switzerland	2015
ECSEPS, Ottawa, ON	2015
ACADEMIC WORK EXPERIENCE	
Teaching Assistant	2013-2015
Research Assistant	2013-2015
NON A CARENIC WORK EVPERIENCE	
NON-ACADEMIC WORK EXPERIENCE	2009-2013
Royal Bank of Canada, Account Service Agent	2009-2015
COMMUNITIY AND VOLUNTEER ACTIVITIES	
Kinesiology Council, Secretary and Treasurer	2014-2015
Mental Health Education Group	2014
Youth Soccer Coach	2013

