# HEAD COACHES' PERCEPTIONS ON THE SELECTION AND DEVELOPMENT OF THE ASSISTANT COACH

Scott Rathwell

A thesis submitted
in partial fulfillment of the requirements
for the degree of
Master of Arts
in Kinesiology and Physical Education
in the Faculty of Education

McGill University, Montreal
September 17, 2012
© Scott Rathwell

#### **Abstract**

Elite level coaches spend a considerable amount of time creating a vision, establishing a seasonal plan, training, and working with assistant coaches (Côté & Salmela, 1996; Vallée & Bloom, 2005). Expert team sport coaches' ability to work with their assistant coaching staff has been noted as a key element of their success (Bloom, 1997). Assistant coaches' roles include helping with team organization, practice planning, and coaching during competitions (Reynaud, 2005). Research has shown head coaches influence their assistant coaches' behaviours and approaches through mentoring and guidance (Bloom, Durand-Bush, Schinke, & Salmela, 1998; Côté, 2006). In football, assistant coaches are particularly important due to large roster sizes and the specialization of playing positions. As a result, head football coaches spend considerable time and effort selecting and developing their assistant coaches. The purpose of the present study was twofold: to examine the criteria head coaches used in selecting their assistant coaches and to examine the career progression, and coaching roles and responsibilities of head assistant football coaches in Canada. Semi structured open ended interviews were conducted with 6 successful Canadian head University football coaches who were identified by a panel of experts familiar with this sport. The sample of coaches won numerous coaching awards (e.g., coach of the year), had team success (e.g., winning Vanier Cup), and were recognized for strong programs in both the classroom and their communities. Head coaches looked for assistants who cared about their athletes, had important personal values concerning loyalty and education, and possessed strong leadership skills. In addition, head coaches chose assistants who possessed a large base of football knowledge from their success as both an athlete and as an assistant coach. In addition, they described the importance of hiring assistant coaches who had different areas of expertise from their own. These results represent one of the first empirical accounts of the knowledge used by head coaches for selecting assistant coaches. In addition, this study represents new information on the primary roles and responsibilities of head assistant coaches. These results will be of interest and benefit to both head coaches and assistant coaches.

#### Résumé

Les entraineurs de niveau élite passent un temps important à créer une vision, établir un plan saisonnier, concevoir des programmes d'entrainement, et travailler avec leurs entraineurs adjoints (Côté & Salmela, 1996; Vallée & Bloom, 2005). La capacité des entraineurs de sport d'équipe à travailler avec leur entraineurs adjoints est considérée comme un élément essentiel à leur succès (Bloom, 1997). Le rôle des entraineurs adjoints inclut le soutien à l'entraineur chef dans l'organisation, la planification des entrainements, et les instructions lors des compétitions (Reynaud, 2005). La littérature a démontré que les entraineurs en chef influencent le comportement et l'approche de leurs entraineurs adjoints par leurs orientations et conseils (Bloom, Durand-Bush, Schinke, & Salmela, 1998; Côté, 2006). Au football, les entraineurs adjoints sont particulièrement importants en raison du grand nombre de joueurs et la spécialisation des nombreuses positions. En conséquence, les entraineurs chef au football prennent beaucoup de temps et mettent des efforts considérables à la sélection et au développement de leurs entraineurs adjoints. Le but de l'étude actuelle était double. Elle avait d'abord pour but d'examiner les critères utilisés par les entraineurs chef dans la sélection de leurs entraineurs adjoints ainsi que d'analyser la progression de carrière de l'entraineur adjoint et par le fait même ses rôles et ses responsabilités au football canadien. Des entretiens ouverts semi-structurés ont été menées avec 6 entraineurs chef de football universitaire canadiens qui avaient été identifiés à priori par un panel d'experts en football canadien. Les entraineurs dans cet échantillon ont remporté de nombreux prix individuels (i.e., l'entraineur de l'année), ont eu du succès avec leurs équipes (i.e., gagner la Coupe Vanier), et sont reconnus pour leurs programmes solides à la fois dans la salle de classe et dans leurs communautés. Les entraineurs en chef ont dit rechercher des assistants qui se soucient de leurs athlètes, qui préconisent la loyauté et l'éducation, et qui possèdent un fort leadership. De plus, les entraineurs chef choisissent des assistants qui possèdent une grande connaissance du football reflétée par leur succès comme athlète et comme entraineur adjoint. Ils ont aussi décrit l'importance d'embaucher des entraineurs adjoints qui ont différents domaines d'expertise. Ces résultats représentent l'un des premiers portraits empiriques des connaissances utilisées par les entraineurs en chef dans le but de sélectionner leurs entraineurs adjoints. Par ailleurs, cette étude fournit une information nouvelle sur les principaux rôles et responsabilités des entraineurs adjoints. Ces résultats sauront intéresser et profiter à la fois aux entraineurs en chef et entraineurs adjoints.

### Acknowledgements

I would like to thank the following people who were instrumental in the completion of my thesis:

- My advisor, Dr. Gordon Bloom for believing in me, providing guidance, and for pushing me to my limits. During my time at McGill I have grown tremendously as a student and as a person. You have prepared me for my next challenge in Ottawa, and I truly appreciate all the extra time you put into helping me with my PhD applications. Thank you for the TOUGH love you have provided over the past two years.
- Dr. Todd Loughead, who let me pick his brain over the past two years and provided insight including but not limited to leadership theories and literature.
- My committee members, including Dr. William Harvey and Dr. Gregory Reid, for their advice and support over the past two years. Also, Clint Uttley for sharing his knowledge on football and assistant coaches.
- The six coaches who agreed to participate in this study. I am truly thankful for their hard work and insights. Without their help this project could never have been possible.
- The McGill Sport Psych lab: Jeff, Will, CA, Gill, and Charlie. The time spent with you made the countless hours in the lab worthwhile. Thanks for all the laughs and I am going to truly miss working with you.
- Our undergraduate companions: Sarah, Sari, and Chris (Sofa). I am glad I met all of you and you were great additions to the lab while you were here. Good luck in your future endeavours.
- Special thanks to Jeff for the showing me the ropes and making sure I stayed out of trouble. You have been a great mentor inside and outside of school and have been a positive influence on my life over the last two years. Also, I want to thank you and Emilie for taking care of me, making me lunches, and always providing support during my poor man days. You two are great people.
- My mom and step dad Martin. I wouldn't be here without your love and support and I can't wait to be living in the same city next year.

- My Grandparents who provided me with financial support and encouragement over the years. I will always remember the lecture I got when I said I only applied to one graduate program because the applications were expensive!
- My second mom and little sister Bailey. Thanks for taking care of me and I am so proud of you for getting accepted into a masters program in nursing here at McGill.
- My brother Kaylen. Thanks for the Barrie trips, the laughs, wrestling matches, brother parties, and most of the best times of my life.
- Big Lou, I couldn't ask for a better friend or a better way to finish my time in Montreal. Living with you in the swamp this summer has been unforgettable. I hear they are looking for project managers at U Ottawa.
- Brad, Blaine, Ryan, Max, Shawn, Tommy, Dawson, Kevin, Brandon, the Tooley family, Mcgee, big easy, Fred, Jay. Thanks for the good times!

## **Table of Contents**

Abstract .										ii
Résumé .	•	•			•					iii
Acknowledgmen	ts .			•						iv
Table of Contents	S .			•						V
Chapter 1										
In	troduction	luction								1
	Purpo	se of th	e Study	<i>'</i> .						6
	Signif	icance								6
	Limita	ations								7
	Opera	tional E	Definition	ons						7
Chapter 2										
Li	terature Re	view								8
	Multio	dimensi	onal M	odel of	Leader	ship				8
	Work	ing Mod	del of C	Coachin	g Effec	tiveness				15
	Trans	actional	and Ti	ansforr	nationa	l Leader	ship ar	ıd Spoi	rt Resea	rch 19
		Transa	actiona	l Leade	rship					20
		Trans	formati	onal Le	adersh	ip .				22
		Sport	Resear	ch						24
	Coach	-Athlet	e Relat	ionship						28
Chapter 3										
M	lethods									33
	Partic	ipants	ě							33

Pro	cedures .	•			•			34		
Data	a Gathering							35		
Inte	erview Guide							36		
Date	a Analysis .							36		
Validity							٠	38		
	Sensitivity to	Conte	ext.		•		-	38		
	Commitmen	t and R	Ligour				•	42		
	Coherence a	nd Trai	nsparen	cy.				42		
	Impact and I	mporta	ince					43		
Chapter 4										
Results.								44		
Nat	ure of Data.				•			44		
Sele	ection of the Hea	d Assi	stant Co	oach				49		
	Head Coach	es' Acc	quisitio	n of Kno	owledge	and C	areer			
	Experiences							49		
	Team Vision	١.						51		
	Assistant Co	Assistant Coaches' Personality Traits and Characteristics								
	Assistant Co	aches'	Hiring	Criteria				54		
Coa	aching Staff Duti	es.						56		
	Recruiting							56		
	Assistant Co	aches'	Job Re	quireme	ents			58		
	Assistant Co	ach – (	Coachin	g Athle	tes Dire	ectly	·	59		
	Support Staf	f – Infl	uence o	of Team				60		
Dev	velopment of Ass	sistant (	Coache	s and A	thletes			61		

										viii
			Career	Develo	pment	of Assis	stant Co	ach	•	61
			Head (	Coaches	s' Relati	ionships	S .			64
			Athlete	e Devel	opment					64
	Summa	ary								66
Chapter	r 5									
	Discus	sion.								69
		Selecti	on of th	ne Head	Assista	ant Coa	ch			69
		Coach	ing Staf	f Dutie	S.					79
		Develo	opment	of Assi	stant Co	oaches a	and Ath	letes		85
Chapter	r 6									
	Summa	ary								91
	Conclu	sions								93
	Practic	al Impl	ications	S .						95
	Limitat	tions ar	nd Reco	mmend	ations			•		97
Referer	ices									99
Append	lices									115
		Appen	dix A	Multic	limensi	onal Mo	odel of I	Leadersl	hip	115
		Appen	dix B	Worki	ng Mod	lel of Co	oaching	Effecti	veness	116
		Appen	dix C	Recrui	tment S	Script		•		117
		Appen	dix D	Demo	graphic	Questic	onnaire	•	•	118
		Appen	dix E	Inform	ned Con	sent Fo	rm			119
		Appen	dix F	Intervi	ew Gui	de		•		120
		Appen	dix G		betical l Participa	Listing o			y of To	122

## Chapter 1

#### Introduction

Coaching involves teaching athletes a combination of sport (e.g., passing techniques), leadership (e.g., decision making), psychological (e.g., confidence), and social (e.g., team work) skills (Bloom, 2002; Côté, Bruner, Erickson, Strachan, & Fraser-Thomas, 2010; Côté & Gilbert, 2009; Wooden, 1988). Furthermore, coaches act as mentors (Bloom, Durand-Bush, Schinke, & Salmela, 1988) and are responsible for promoting a positive environment for both youth (Smith, Smoll, & Curtis, 1979) and adult athletes (Vallée & Bloom, 2005; Wooden, 1998). Coaching often becomes a full time job at the elite level, which involves organizational tasks, training athletes, and working with assistant coaches (Bloom, 2011; Côté & Salmela, 1996). In order to manage the high demands of working with an elite sports team, coaches require a great deal of knowledge and leadership skills.

The role of the assistant coach is to support the head coach by providing assistance and expertise on practice plans, training ideas, team selection, and team organization (Bloom, 1997; Gilbert & Trudel, 2004a; Reynaud, 2005; Solomon, 2002). Bloom examined the knowledge, strategies, and characteristics of expert team sport coaches and found their ability to work with their assistant coaching staff was a key element to their success. Coaches emphasized the importance of hiring competent and loyal support staff to help with various elements of training and competition. Furthermore, Gilbert and Trudel noted that most sport teams rely on assistant coaches to plan, organize, and guide the coaching process. The need for assistant coaches is particularly important in football due to the large roster sizes and specialization of many positions. More precisely, there are typically between 10-12 assistant coaches on each football coaching staff. Their responsibilities and titles range from offensive or defensive coordinators to receiver or linebacker coaches.

Despite the importance placed on head coaches working with their assistant coaching staff, the interactions between the head coach and their assistant coaches have received scant empirical attention (Gilbert & Trudel, 2004a), Research that has examined the assistant coach-head coach relationship revealed that head coaches influenced their assistant's coaching styles through mentorships and careful guidance (Bloom et al., 1998; Côté, 2006; Gould, Giannini, Krane, & Hodge, 1990). For example, Bloom and colleagues interviewed 21 expert team coaches who indicated that, as assistant coaches, they learned a great deal through observations and conversations with their head coach. Furthermore, these coaches noted that once achieving expert coach status they took pride in developing their assistant coaches.

Researchers have also discussed the roles of the assistant coach and have investigated different facets of this relationship (e.g., Solomon, 2001a, 2002; Solomon et al., 1996). For example, Solomon (2001a) studied American University assistant coaches and found they formed their expectancies of players differently than head coaches, drawing from different informational sources. In addition, Solomon et al. (1996) found head and assistant coaches treated players differently based on their expectations. Specifically, assistant coaches provided more supportive feedback to athletes and focused more on low expectancy athletes than head coaches. Compared to assistant coaches, head coaches provided more corrective feedback and interacted more frequently with high expectancy athletes. These results suggest that by combining their assessments and feedback, head and assistant coaches can work together to provide a richer evaluation and better development of their players. In conclusion, research has examined the relationships and duties of head and assistant coaches. Findings have indicated that head and assistant coaches worked closely together and collaborated to

make more informed decisions by drawing from multiple viewpoints and sources of information.

Assistant coaches are unique because they simultaneously act as followers to the head coach and leaders to athletes. Therefore, Bass' (1985) theory of transformational leadership was particularly relevant for examining head coach leadership behaviours when dealing with their assistant coaching staff. Bass noted that leaders were either transactional or transformational depending on the different behaviours (e.g., contingent reward, inspirational motivation) they demonstrated to followers. According to Bass, transactional leaders directed followers by setting clear guidelines, indicating rewards for meeting task requirements, and by intervening when followers failed to meet their demands (Bass & Riggio, 2006). Unlike transactional leaders, transformational leaders do not only operate via exchange relationships (Bass & Riggio, 2006). They elevate followers' performance and satisfaction to new heights by "inspiring followers to commit to a shared vision and goals for an organization or unit, challenging them to be innovative problem solvers, and developing followers' leadership capacity via coaching, mentoring, and provision of both challenge and support" (Bass & Riggio, 2006, p. 4). As a result, transformational leaders have produced followers who were more committed, involved, and loval to their organizations (Bycio, Hackett, & Allen, 1995). The positive results associated with transformational leadership may be applicable to the head coach-assistant coach relationship. For example, Bass' theory on transformational leadership may provide information on how head coaches develop assistant coaches who are more motivated towards the team's goals, perform beyond expectation, and are able to improve athlete satisfaction and performance.

In addition to measuring coaches' behaviours, the current study utilized Chelladurai's (1978) Multidimensional Model of Leadership (MML) (Appendix A) and Horn's Model of Coaching Effectiveness (Appendix B) as theoretical frameworks for understanding the antecedents to and consequences of coaching behaviours. According to the MML, in order to increases members' satisfaction and performance coaches must balance the demands of their environment, their personal characteristics, and their team member's characteristics.

Research on the MML indicates that athletes prefer different coaching behaviours depending on their personal characteristics and their situational demands (Beam, Serwatka, & Wilson, 2004; Chelladurai & Saleh, 1980; Terry, 1984; Terry & Howe, 1984). In conclusion, the MML helps identify behaviours head coaches might be looking for in their assistant coaching staff. This differs from Bass' (1985) theory on transformational leadership which will provide information for explaining the behaviours head coaches use to develop their assistant coaches.

Horn's (2002) Working Model of Coaching Effectiveness is similar to Chelladurai's (1978) model because it provides a framework for examining coaching behaviours and the antecedents to coaching behaviour required for effective coaching. Horn's model indicates that coaches' behaviours are predicted by the interaction of their personal characteristics, the environment, and their team members' personal characteristics with the coaches' expectancies, values, beliefs, and goals. Horn's model is similar to the MML in its evaluation of coaches' behaviours and the antecedents that influence coach behaviours. However, Horn's model differs from the MML in its focus. Whereas the MML focuses on the relationship between coaches' behaviours and the preferences of the athletes, Horn's model focuses on the relationship between coaches' knowledge and cognitive processes

(expectancies, values, beliefs, and goals) and their behaviours. Therefore, Horn's model was used to examine how head coaches knowledge and cognitive processes affect how they behave towards their assistant coaches.

It was important to also understand the emotional relationship that exists between the head and assistant coach. The current study utilized the 3 + 1 Cs model (Jowett & Lavallee, 2007) as the theoretical framework for studying the emotional relationship between the head and assistant coach. The 3 +1 Cs model was designed to measure dyadic relationships and has been used to evaluate the coach-athlete relationship in the past (Jowett, 2003; Jowett & Lavallee, 2007; Philipe & Seiler, 2006). Jowett and Lavallee suggested that a successful working relationship between coach and athlete was interdependent, which required closeness (e.g., feelings of trust and respect), commitment (e.g., attachment and intention to maintain athletic relationship), and complementarity (cooperation and reciprocal behaviours). Research examining the 3 + 1 Cs model found that both athletes and coaches believed that having a strong coach-athlete relationship on the 3 Cs was vital to the success and performance of athletes (Jowett, 2003; Philipe & Seiler, 2006). Furthermore, athletes and coaches who had close, complementary, and committed relationships felt more cohesive and unified towards the team goals. It is possible that the same relationship exists between head and assistant coaches where communication, commitment, collaboration, and trust will be important factors in developing the assistant coach, and will lead to more successful staffs.

The current study used a qualitative approach to evaluate the knowledge, cognitive processes, and leadership behaviours head coaches use to select and develop their assistant coaching staff. In Gilbert and Trudel's (2004a) review of 30 years of coaching literature they noted that most sport teams rely on assistant coaches to plan, organize, and guide the

coaching process. However, despite their importance, assistant coaches are underrepresented in coaching science research. Furthermore, they found that 80% of coaching research was conducted using quantitative methodologies. This led them to appeal for an increase in qualitative coaching science research. Qualitative research is used when there is a need to provide a complex detailed understanding of an issue (Creswell, 2007) and is beneficial for exploratory studies where there is little known on the subject of interest (Strauss & Corbin, 1990). Creswell (2007) recommended interviews for collecting data when using a qualitative design. Therefore, information on how head university football coaches selected and develop their assistant coaching staff was acquired with the use of open ended interviews. Open ended interviews are similar to a normal conversation (Lincoln & Guba, 1985), permit the interviewer to initiate the topic of discussion, allow interviewees the opportunity to decide what is relevant, and encourage interviewees to speak freely with little restriction (Rubin & Rubin, 1995).

## **Purpose of the Study**

The purpose of this study was to provide an in depth description of the knowledge, cognitive processes, and leadership behaviours head Canadian university football coaches used to select, utilize, and develop their head assistant coach. The central research questions were why head coaches selected their head assistant coaches, how they developed them after their selection, and what were their main roles were on the team.

## Significance

The present study provided information on the selection and developmental process of the head assistant coach from the perspective of the head coach and expanded coaching leadership literature by exploring the head-coach and assistant-coach relationship. In

addition, the current study provided valuable knowledge for coaches in charge of a sport program by understanding how successful head coaches selected and developed their assistant coaching staff. Furthermore, information on how coaches developed their head assistant can be useful for coach education programs by illustrating successful methods of coach development. Moreover, the present study provided information for assistant coaches on the roles, expectations, and requirements involved in assistant coaching at an elite level. Finally, the current study added to a series of studies conducted at the sport psychology lab at McGill University that may ultimately help lead to the formation of a model for explaining the head coach-assistant coach relationship.

#### Limitations

The following limitations were identified in this study:

- 1. It is assumed that participants will respond truthfully to the interview questions.
- 2. Results may only be applicable to Canadian University Football coaches.
- 3. Results may only be applicable to the head assistant coach.
- 4. Results may only represent the point of view of the head coaches because the study's focused on the perspective of the head coach.

## **Operational Definitions**

For the purpose of this study, the following definitions were used:

Leadership will be defined as the behavioural process of influencing individuals and groups toward set goals (Horn, 2002).

Head Assistant Coach will be defined as the assistant coach who has the most responsibilities.

## Chapter 2

#### **Literature Review**

This chapter will consist of 4 main sections. First, the Multidimensional Model of Leadership will be described. Furthermore, the relationship between coaches' behaviours and athletes' preferences will be explored. Second, the Working Model of Coaching Effectiveness will be summarized with a particular emphasis on explaining how coaches' cognitive processes affect their behaviours. Third, Bass' theory of transformational leadership will be described, followed by an investigation of studies that have extended his theory to coaching and sport. The final section will describe the coach athlete relationship using the 3 +1 Cs model.

## **Multidimensional Model of Leadership**

Chelladurai's (1978) Multidimensional Model of Leadership (MML) was the first behavioural model designed specifically to assess sports leadership. The MML is a linear model that measures leadership effectiveness by assessing athlete performance and satisfaction (Appendix A). Athletes' performance and satisfaction are affected by coaches' ability to display the appropriate leadership behaviours in response to the demands of the environment, their team, and their personal character (Chelladurai, 1990).

The MML suggests that leadership effectiveness (athlete satisfaction and performance) depends on three states of behaviour (required, preferred, and actual), which are influenced by three antecedents (situational characteristics, leader characteristics, and member characteristics (Chelladurai, 1978). Required behaviour is the appropriate context specific behaviour that a leader should demonstrate. For example, a coach will be strict and demanding when coaching an elite football team (e.g., university football) but will be more

lenient and caring when coaching youth football. Preferred behaviour refers to team members' desired coaching behaviours regarding training, instruction, feedback, and social support. Leaders' actual behaviours are decisions and actions exhibited by the leader that attempt to balance the situational demands with the preferences of the team members. The three antecedents that influence leader behaviours are the leaders' personal characteristics (e.g., age, sex, experience level, and leadership styles), the situational characteristics of the team (e.g., type of sport, and cultural values), and the individual team members' characteristics (e.g., age, sex, experience, and skill level). In sum, effective leadership involves complex interactions between leaders, team members, and situational limitations. Furthermore, coaches are required to balance the situational demands (required behaviours) with the individual preferences of their team members (preferred behaviours) to make the appropriate decisions and actions (actual behaviours) to produce the highest level of performance and satisfaction in their athletes.

The Leadership Scale for Sport (LSS) was developed to assess the MML (Chelladurai & Saleh, 1980). The LSS is a 40 item scale used to measure how coaches' behaviours effects athletes' satisfaction and performance (Chelladurai, 2007). Coaches' behaviours are measured by five dimensions: training and instruction, autocratic behaviour, democratic behaviour, positive feedback, and social support (Chelladurai, 1990). First, training and instruction includes teaching physical skills and techniques, coordinating team activities (e.g., practices), and describing team roles. Second, autocratic behaviour stresses coaches' personal authority and independent decision making. Third, democratic behaviour encourages the participation of others (e.g., assistant coaches or players) in the decision making process. Fourth, positive feedback entails rewarding and encouraging athletes for

their achievements. Finally, social support involves establishing warm and caring interpersonal relationships and is characterized by a concern for the welfare of athletes.

Two avenues of research have assessed the MML (Jowett & Lavallee, 2007): the congruency hypothesis and the leadership preferences of athletes. Chelladurai's (1978) congruency hypothesis stipulates that athletes should be more satisfied and should perform at higher levels if coaches' actual behaviours match athletes' preferred coaching behaviours. Research investigating the congruency hypothesis has produced mixed results (Riemer & Chelladurai, 1995; Riemer & Toon, 2001). For example, Riemer and Toon studied elite tennis players and found that their satisfaction level was not affected by the level of congruence between their perceived and preferred coaching behaviour. Other studies have shown athlete satisfaction to be related to the congruence of specific coaching behaviours (Horne & Carron, 1985; Riemer & Toon, 2001; Schliesman, 1987; Sherman, Fuller, & Speed, 2000). For example, Riemer and Toon found athlete's satisfaction was determined by coaches' level of social support. Furthermore, Sherman and colleagues found positive feedback and training and instruction were strongly correlated with athlete satisfaction. In addition, Schliesman studied track and field athletes and found satisfaction was related to perceived and preferred congruence of coaches' democratic behaviour. Therefore, research on the congruency theory has produced a variety of results. Of importance, Chelladurai (1993) noted that athletes were satisfied when coaches' training and instruction and positive feedback matched their preferences.

Similarly, congruence of coaches' training and instruction and positive feedback also predicted athlete's performance (Chelladurai, 1984; Horne & Carron, 1985). For example, Chelladurai found that coaches who displayed levels of training and instruction and positive

feedback similar to player's preferences had athletes who were more satisfied with their team's performance. Likewise, Horne and Carron found that athletes perceived themselves to perform at higher levels when coaches' actual behaviour was similar to their preferences for positive feedback. In conclusion, there have been mixed results regarding the effects of the congruence between athletes' perceived and preferred coaching behaviours, however the best predictor of athlete satisfaction and performance occurred when coaches' training and instruction and positive feedback behaviours matched their players' preferences.

The second major area of MML research investigated how member characteristics (e.g., gender, age, experience, and skill level) and situational characteristics (e.g., sport type and culture) affected athlete's coaching behaviour preferences (e.g., Beam et al., 2004; Chelladurai & Saleh, 1980; Chelladurai & Carron, 1981; Chelladurai, Imamura, Yamaguchi, Oimnuma & Miyauchi, 1988; Erle, 1981; Riemer & Toon, 2001; Terry, 1984; Terry & Howe, 1984). Research on the effects of athletes' personal characteristics has produced mixed results. For example, Terry and Howe studied 80 male and female athletes and found no gender based differences for coaching behaviour preferences. On the other hand, Chelladurai and Saleh discovered that male athletes preferred their coaches to be more autocratic than female athletes. Furthermore, male athletes have also been shown to prefer more training and instruction than female athletes (Erle, 1981). Additionally, Riemer and Toon noted that female athletes preferred more social support than their male counterparts.

Terry and Howe (1984) examined college and club level athletes' preferences for coaching behaviour. The results revealed that age was not a predictor for the coaching behaviours preferred by athletes. Conversely, Chelladurai and Carron (1981) noted that less experienced athletes preferred coaches who were less autocratic in their decision making

style. Furthermore, they found more experienced athletes preferred more social support than athletes who had less experience in their sport. In addition, experienced athletes have also been shown to prefer coaches who provide more positive feedback compared to less experienced athletes (Erle, 1981). The results on gender and sport experience suggest that Canadian Interuniversity Sport (CIS) football players will likely prefer coaches who have an autocratic decision making style, who emphasize training and instruction, and who provide positive feedback.

In sum, although research on personal characteristics has discovered conflicting results, outcomes suggested potential differences in athletes perceptions based on gender, age, experience, and skill level. Evidence suggested that men preferred coaches who provided more training and instruction and stressed personal authority and independent decision making. On the other hand, evidence suggested that female athletes preferred coaches who were more warm and caring. In addition, younger and less experienced athletes enjoyed coaches who are less adamant on personal authority and independent decision making. Meanwhile, more experienced athletes preferred an autocratic style of leadership paired with positive feedback.

Athletes' situational characteristics are also believed to influence coaching behaviour preferences (Chelladurai, 1978). As a result, researchers have investigated the relationship between athletes' preferences for coaching behaviour and culture (Bolkiah & Terry, 2001; Terry, 1984) and type of sport (Beam et al., 2004; Chelladurai et al., 1988; Riemer & Chelladurai, 1995; Terry, 1984; Terry & Howe, 1984). In a study of athletes competing in the 1983 university games, Terry found that athlete's culture was not a predictor of athletes preferred coaching behaviours. However, Terry's study only examined athletes from Great

Britain, Canada, and the United States which share a similar western culture. On the other hand, when comparing athletes who came from cultures that differed significantly from each other (e.g., Canada vs. Japan), researchers noticed different cultural preferences for coaching behaviours (Bolkia & Terry, 2001; Chelladurai et al., 1988). For example, Bolkia and Terry found that Bruneian athletes preferred more training and instruction, democratic behaviour, and social support compared to British athletes. Likewise, Chelladurai et al. (1988) found differences in coaching behaviour preference between Japanese and Canadian athletes. Japanese athletes showed preferences for more autocratic coaching behaviour and more social support and preferences for less training and instruction compared to Canadian athletes.

Chelldurai (1978) believed that athletes from different sports would also prefer different types of coaching behaviours. Specifically, he predicted that athletes of independent (athletes' success depends little on interaction with others) and closed sports (low variability in the environment of the athlete) would prefer different coach leadership behaviours compared to athletes of interdependent (team sport) and open (high variability in athletes' environment) sports. Chelladurai proposed that athletes of closed and independent sports (e.g., swimming) would prefer more social support and democratic leadership and less autocratic behaviour than athletes of interdependent and open sports (e.g., football). Furthermore, he predicted open and interdependent athletes would prefer more training and instruction and more positive feedback than athletes of closed and independent sports. Research testing Chelladurai's predictions have produced mixed results (Beam et al., 2004; Chelladurai & Saleh, 1980; Terry, 1984; Terry & Howe, 1984). For example, Chelladurai and Saleh provided conflicting evidence concluding that independent closed sport athletes

preferred more training and instruction than athletes of open interdependent sports. On the other hand, Terry found confirming results when investigating athletes competing at the world university games. Terry examined 95 male and 65 female elite athletes competing at Universiade '83 and discovered that athletes in team sports (interdependent) preferred more training and instruction and autocratic behaviour and less democratic and social support behaviour than athletes of single sports (independent). Similarly, Beam and colleagues found that NCAA athletes of independent sports also preferred their coaches to be more democratic than interdependent athletes. However, contrary to Chelladurai's (1978) propositions they found that athletes of independent sports preferred more positive feedback than athletes who played interdependent sports. Therefore, research on types of sport suggests that athletes from team sports such as football will likely enjoy coaches that focus on training and instruction and have an autocratic decision making style.

In conclusion, researchers have investigated athletes' preferences for coaching behaviour based on their personal and situation factors as well as athletes relationships with their coaches. Although research on personal and situational characteristics has produced conflicting results, outcomes suggest potential differences in athletes preferences based on gender, age, experience, type of sport played, and culture. Research on situational and personal characteristics of athletes suggests that male university football players will prefer training and instruction and autocratic behaviour from their coaches. Furthermore, there is evidence that athletes will be more satisfied and perform better when coaching behaviour matches their preferences. Therefore, head university football coaches may employ assistant coaches based on these leadership qualities.

## **Working Model of Coaching Effectiveness (WMCE)**

Horn's (2002) WMCE (Appendix B) combines the coaches' and players' social, cultural, and personal aspects and can be summarized by three main assumptions (Horn, 2002). First, antecedent factors (sociocultural context, organizational climate, and coaches' personal characteristics) interact with coaches' expectancies, values, beliefs, and goals to influence coaches' behaviours. Second, coaches influence athletes' performance and behaviours through direct interactions, as well as indirectly through athletes' perceptions of coaching behaviour. Third, the effectiveness of coaching behaviour is influenced by a combination of situational factors (e.g., sport type, competition level) and athletes' personal factors (e.g., age, psychological attributes).

The WMCE suggests that there are no universally effective coaching behaviours. Rather, coaches must adapt their coaching behaviours to the needs of their athletes and to the specific sport context. Similar to the MML and the coaching model (Côté, Salmela, Trudel, Baria, & Russell, 1995), the WMCE stipulates that coaches' ability to lead effectively depends on an amalgamation of coaches' and players' situational and individual characteristics. In addition, the WMCE describes coaches' knowledge and cognitive processes such as their expectancies, values, beliefs, and goals for their team as influencing their coaching behaviours. Although the WMCE provides a strong theoretical framework for evaluating coaches' thoughts and behaviours, Myers, Vargas-Tonsing, and Feltz (2005) noted there is still work remaining to clarify the relationships within the model. To date, researchers have examined elements of the model separately (e.g., Gilbert & Trudel, 2004b; Solomon, 2008). In the current study, the coaches' expectancies, goals, values, and beliefs

will be examined to see how they influence their behaviours towards their head assistant coach.

Coaches' expectancies are formed through their evaluation of athletes' psychological (e.g., coachability, confidence, and maturity), personal (e.g., age, weight, and race), and performance (e.g., performance statistics, skill tests) cues (Solomon, 2010). Research investigating the relationship between coaches' expectancies and coaches' behaviours has focused primarily on evaluating the self-fulfilling prophecy (e.g., Horn, 1984; Rejeski, Walter, Darracott, & Hutslar, 1979; Solomon, 2001a, 2008, 2010). The self-fulfilling prophecy theory originated from research in educational settings (e.g., Brophy, 1983; Harris & Rosenthal, 1985), and has recently been adapted for sport settings (Horn, 2002). When adapted to coaching, the model predicts that coaches begin their season with expectancies for each of their athletes, which then influences how they treat their players. Following this, players conform to the initial expectancies of the coaches because of differential treatment received from their coaches. There is evidence for the self-fulfilling prophecy at elite levels of competition (college and national level) (DiMarco, Ohlson, Reece & Solomon, 1998; Sinclair & Vealy, 1989; Solomon, 2008; Solomon et al., 1996). For example, in college, athletes who coaches expected to perform at the highest level (high expectancy athletes) received more feedback from their coaches than athletes who were expected to perform at lower levels (low expectancy athletes) (Solomon et al., 1996). Similarly, at the national level, high expectancy athletes were appraised more and received more precise feedback than low expectancy athletes (Sinclair & Vealy, 1989).

Research on how coaches formed their expectancies emerged from Solomon and colleagues (Solomon, 2001a, 2001b, 2002, 2010; Solomon et al. 1996). These studies were

among the first to examine head and assistant coaches, and to find differences in their roles (Rangeon, 2009). Solomon and colleagues have compared how head and assistant coaches formed their evaluations of athletes and how they treated them following their evaluations. For example, Solomon (2001b) examined American division one team sport athletes and their respective head coaches to see how coaches' expectations predicted athletic performance. Specifically, Solomon compared the players' actual performance (e.g., points per game) with the head coaches' expectancies of their athletes' performance based on psychological cues (e.g., confidence) and performance cues (e.g., speed). Solomon found that head coaches' assessment of their player's psychological skills was the best predictor of players' actual performance. On the other hand, Solomon (2001a, 2002) measured division one university assistant coaches' performance expectancies of their athletes and compared them to players' actual performance. Contrary to her earlier research (2001b), Solomon (2001a, 2002) found assistant coaches' evaluation of performance cues was the best predictor of their athletes' ability. Taken together, these studies demonstrated head coaches evaluated players differently than assistant coaches, drawing from different informational sources. Therefore, head coaches may use assistant coaches to offer different perspectives when recruiting and evaluating new players.

In addition to evaluating athletes differently, Solomon and colleagues have also found head and assistant coaches treated players differently based on their expectations of their athletes (Solomon et al., 1996). For example, they asked five head and three assistant division one basketball coaches to rate their players as either high or low expectancy players and observed the behaviours coaches displayed towards their players. They found that head and assistant coaches behaved differently toward players depending on how skilled they

believed their players were. Specifically, assistant coaches offered more instruction to low expectancy athletes than head coaches. Furthermore, they noted that assistant coaches provided more reinforcement and encouragement compared to head coaches who offered more corrective feedback. Finally, assistant coaches provided more feedback to all athletes than head coaches. These results suggest that assistant coaches played a different role from head coaches that may have involved interacting more frequently with athletes and providing more feedback and encouragement, specifically with low expectancy athletes. Solomon and colleagues' studies are important to coaching science research because they are some of the first to investigate the different roles of the head and assistant coach.

In conclusion, there has been some research investigating the link between coaches' values, beliefs, goals, and expectancies, with the larger majority of this research focusing on how coaches' expectancies influenced their behaviours. At the elite level, coaches' expectancies of their athletes changed how they treated their players individually, which in turn shaped the development of their athletes throughout the season. Furthermore, head and assistant coaches used different evaluation cues to assess their players and treated players differently by providing different feedback. Assistant coaches provided more feedback to athletes and focused more on low expectancy athletes than head coaches. These results suggest that head coaches may use their assistants to encourage their players, specifically ensuring that low expectancy players stay motivated and develop properly. In sum, head and assistant coaches can work together to select and shape athletes using different viewpoints, sources of information and methods of treatment.

## Transactional and Transformational Leadership and Sport Research

Burns (1978) introduced and differentiated the concepts of transactional and transforming leadership in the late 1970's through his investigation of political leaders. Burns noted transactional leaders were interested in reaching agreement between leader and follower that satisfied both immediate self-interests. For example, governmental leaders offered subsidies to companies in exchange for campaign contributions. On the other hand, transforming leaders were less concerned with satisfying follower's immediate self-interests and were more concerned with empowering and developing leadership in their followers.

Bass' (1999) review of two decades of leadership literature found that transformational leadership consistently produced more favourable outcomes than transactional leadership. The outcomes included raising the levels of the follower's commitment, involvement, and loyalty, as well as increasing the follower's performance. For example, Bycio, Hackett, and Allen (1995) assessed the effects of leadership behaviours (transformational vs. transactional) on outcomes variables (i.e., extra effort, satisfaction with the leader, leader effectiveness, and intent to quit) of nurses working under leaders who displayed transformational and transactional leadership behaviours. They found that those individuals who received transformational leadership were more satisfied with their leaders, believed their leaders to be more effective, had lower intent on quitting their positions as well as their profession, and exerted more effort than nurses who received transactional leadership.

Originally Burns (1978) described transformational leadership as independent of transactional leadership. However, Bass (1985) found that transactional and transformational leaders were not opposite of each other. Rather, transformational leadership was an extension

of transactional leadership that induced new degrees of follower satisfaction and performance. Thus, instead of replacing it, transformational leadership is combined with transactional leadership to increase effectiveness. Evidence supporting this relationship has been demonstrated in research on Russian managers (Elenkov, 2002), and American navy officers (Waldman, Bass, & Yammarino, 1990). For example, Elenkov investigated the organizational performance of 350 Russian companies under transformational and transactional managers. Elenkov selected 253 supervisors and 498 subordinates for this study. Managers' leadership behaviours were rated by their subordinates, and organizational performance was measured by the company's ability to meet their business objectives. Elenkov found that transactional leadership significantly contributed to the achievement of organizational goals. However, managers who also displayed transformational behaviours significantly predicted organizational performance beyond the impact of transactional leadership alone. Transformational managers increased performance beyond transactional leadership through their support of innovation and their ability to increase team cohesion.

Transactional Leadership. Transactional leaders direct followers by setting clear guidelines, indicating rewards for meeting task requirements, and by intervening when followers fail to meet their demands (Bass & Riggio, 2006). For example, Bass (1985) studied military officials and discovered that transactional leadership encompassed three components: contingent reward, active management by exception, and passive management by exception. Contingent reward entails providing reinforcement for desired outcomes (e.g., awarding a bonus for reaching a number of sales in a month). Active management by exception involves monitoring for deviances or mistakes, and taking corrective action so that errors do not occur. Passive management by exception also involves taking corrective action,

however rather than monitoring for errors and deviances, leaders wait passively and only intervene once problems arise. In conclusion, contingent reward establishes the exchange relationship (task and reward) and active and passive management by exception ensures that the exchange operates efficiently.

Transactional leadership research has investigated how the three components related to leader effectiveness, as well as their influence on followers' job performance and satisfaction. Positive outcomes with numerous leaders who adopted a transactional leadership style have emerged (Atwater, Camobreco, Dionne, Avolio, & Lau, 1997; Howell & Hall-Merenda, 1999; Judge & Piccolo, 2004; Podsakoff, Todor, Grover, & Huber, 1984; Podsakoff, Todor, & Skov, 1982). However, positive outcomes related were only associated with two of the three components of transactional leadership. Therefore, the use of both contingent reward and active management by exception were linked with improving follower performance, but passive management by exception was not. Thus, by establishing requirements and rewards (contingent reward) and by actively monitoring for errors (active management by exception), transactional leaders were able to improve follower's job performance (Podsakoff et al., 1982), increase follower's satisfaction with their job and leader (Podsakoff et al., 1984), heighten follower motivation (Judge & Piccolo, 2004), and increase leader effectiveness (Atwater et al., 1997).

In sum, transactional leadership is an effective form of leadership that operates through the establishment of carefully monitored mutually beneficial exchange relationships. Furthermore, leaders are able to create and monitor exchange relationships through contingent reward, active management by exception, and passive management by exception.

However, the focus of these exchange relationships was purely to satisfy the immediate selfinterests of both leader and follower.

**Transformational Leadership.** Unlike transactional leaders, transformational leaders do not only operate via exchange relationships (Bass & Riggio, 2006). They elevate followers' performance and satisfaction to new heights by "inspiring followers to commit to a shared vision and goals for an organization or unit, challenging them to be innovative problem solvers, and developing followers' leadership capacity via coaching, mentoring, and provision of both challenge and support" (Bass & Riggio, 2006, p. 4).

Transformational leadership research began when Bass (1985) extended Burns' (1978) concepts and applied it to the field of organizational psychology through his study of United States military officials. Through his work, Bass identified the psychological mechanisms for measuring transformational leadership. Initially, Bass described 3 characteristics of transformational leadership: intellectual stimulation, individualized consideration, and charismatic-inspiration. Through factor analysis in later studies, charismatic-inspiration would be divided into two categories (idealized influence, and inspirational motivation) and in combination with intellectual stimulation and individual consideration would compose the 4 I's (intellectual stimulation, individual consideration, inspirational motivation, and idealized influence) of transformational leadership that we know today (Bycio et al., 1995; Howell & Avolio, 1993). Transformational leaders intellectually stimulate followers to be creative and resourceful by challenging them to rethink their old ways. Moreover, they are individually considerate, which means they foster personal growth in their followers. In addition, transformational leaders demonstrate inspirational motivation by forming a vision of a desirable future, articulating how the vision can be accomplished, and setting high performance standards in order to achieve their vision. Furthermore, they establish idealized influence through developing trust, respect, and admiration by setting a good example of the behaviors and values that they wish to convey in order to accomplish their vision.

Early research on transformational leadership came from studies on the military (Bass, 1985; Longshore, 1988; Waldman et al., 1990). These studies demonstrated that transformational military leaders contributed more to the unit's mission, had more satisfied followers, and were viewed as more effective leaders by their subordinates. Following studies on military leaders, research on transformational leadership has demonstrated similar results with other organizational settings including schools (Koh, Steers, & Terborg, 1995), hospitals (Bycio et al., 1995), and businesses (Podsakoff, MacKenzie, Moorman, & Fetter, 1990).

The positive results associated with transformational leadership have led researchers to examine whether transformational leaders were born or made. Research indicates that transformational leadership was not something leaders were born with (Avolio & Gibbons, 1988; Kelloway & Barling, 2000; Kuhnert & Lewis, 1987). For example, Kuhnert and Lewis believed that transformational leaders went through a process of mature moral development through interactions with their parents. Likewise, Avolio and Gibbons reported that transformational leaders had parents who set difficult goals, while simultaneously supporting their efforts regardless of whether or not they succeeded. Furthermore, Bass (1999) explained that transformational leadership also developed from school and work experience as a young adult. Therefore, research suggests that transformational leaders were developed and that this development occurred early in life.

Stemming from the notion that transformational leadership was developed in early life, some researchers investigated whether transformational leadership could be trained (Barling, Weber, & Kelloway, 1996; Kelloway & Barling, 2000). For example, Barling, and colleagues examined whether transformational leadership could be taught to bank managers. The managers were divided into a control group and a training group. Managers in the training group were taught how to be more transformational. This involved a one day training session where they were familiarized with the concepts of transformational leadership and were taught how to apply them within their work context. Manager's subordinates were required to fill out a questionnaire two weeks before and five months after the intervention. Compared to those in the control group, after receiving transformational leadership training, the bank managers were able to successfully increase follower's perceptions of their transformational leadership characteristics, and actually improve outcome variables such as sales in their respective branch.

Finally, in addition to the ability to be trained, transformational leadership has been shown to transcend through organization ranks (Bass, Waldman, Avolio, & Bebb, 1987). This means that leadership patterns found at a higher level of management appeared to be emulated at the next subordinate level. This could be very beneficial for sports teams as head coaches attempt to develop leadership throughout successive ranks from assistant coaches to player leaders.

**Sport Research.** Bass and Riggio (2006) stated that the principles of transformational leadership could be applied to all aspects of life. Elite sports teams share many organizational similarities found in large organizations. First, each has a hierarchical organization of power. Second, leadership is developed throughout the hierarchy starting at the top level. Finally, all

organizations including sport want followers to perform at their maximum potential. As a consequence, researchers have begun to apply transformational leadership to sport (e.g., Charbonneau, Barling, & Kelloway, 2001; Hoption, Phelan, & Barling, 2007; Rowold, 2006; Vallée & Bloom, 2005).

Hoption et al. (2007) highlighted reasons for studying transformational leadership in sport. First, there are a vast number of studies on transformational leadership in organizational settings from which sport psychology can borrow, apply, and advance. Second, transformational leadership provides an extensive framework for sport since it has been empirically tested across cultures and in numerous non sport settings. Third, evidence suggests that transformational leadership can be taught. Fourth, transformational leadership focuses on developing followers. Finally, the role of leaders in teams has been empirically tested in non-sport contexts and should be evaluated within sport settings.

Furthermore, Hoption et al. (2007) interviewed former hockey players, coaches, and managers who worked with hockey legend Wayne Gretzky. The interviews concentrated on the leadership characteristics of Gretzky and were used to compare and contrast his leadership behaviours with elements of transformational leadership. Hoption and colleagues described Gretzky's behaviours as transformational because of his strong morals, his ability to instil pride in his followers, his influence on followers to buy into the team goals, and the individual attention he gave to everyone no matter their role on the team.

Vallée and Bloom (2005) suggested the importance of transformational leadership in coaching. Their study focused on how some of the highest regarded Canadian team sport coaches built their successful programs. Their results found that the coaches' leaderships behaviours were similar to the 4 I's of transformational leadership. The coaches in the study

were "visionaries, motivators, goal setters, and organizational leaders who were able to achieve success by gaining commitment and enthusiasm from their followers by having them buy into their vision" (Vallée & Bloom, 2005, p. 193). Additionally, the coaches led with their personalities, set high performance goals, and developed a healthy relationship with their players based on respect, trust, communication and care. Furthermore, they empowered their players, involved the players in the decision making process, and promoted player leadership inside and outside of sport. Finally, the coaches respected athlete's personal differences and attempted to empower each athlete as an individual. In sum, these results indicate that successful coaches displayed many of the behaviours of transformational leadership.

In light of the proposed benefits, researchers have investigated the effectiveness of transformational leadership in coaching and have demonstrated associations with coaches' effectiveness, player's production level, satisfaction with their coach and extra effort exerted (Charbonneau et al., 2001; Rowold, 2006). For example, Rowold examined nearly 200 martial arts students' perceptions of their coaches' leadership behaviours (transformational and transactional) and coaching effectiveness (effectiveness of coach, satisfaction with coach, and athlete's extra effort). Similar to results found in other organizational settings, athletes who received more transformational leadership rated their coach as more effective, were more satisfied with their coach, and exerted more effort than those athletes receiving transactional leadership. Furthermore, Charbonneau et al. studied 168 university athletes and demonstrated that transformational leadership improved athlete performance through a mediating effect of intrinsic motivation. As a result, athletes' who perceived their coaches to

be more transformational demonstrated an increase in intrinsic motivation which translated to improved sport performance.

Research in sport has also examined coaches' ability to create and sell their vision (Bloom, Stevens, & Wickwire, 2003; Charbonneau et al., 2001; Vallée & Bloom, 2005; Yukelson, 1997). In transformational leadership, a leader's vision is an important tool used to inspire and motivate followers towards shared organizational goals (Bass & Riggio, 2006). In sport, coaches described their visions as the long term goals of their sport programs (e.g., winning a championship in the next 3 years) as well as the short term goals of the players and team. Coaches' visions were important because they influenced everything from team selection, seasonal planning, practices, and goal setting. Similarly, Bloom et al. found that coaches' visions enabled them to set guidelines for team rules, and allowed them to set individual and team goals. As a result, coach's described that setting team goals was an important factor for developing team cohesion. The coaches believed that setting team goals had the ability to bring the players together and unify the team toward their shared goal, which is also an outcome of transformational leadership.

In conclusion, transformational leadership can be applied to sport. It has been shown to increase player's performance, satisfaction, intrinsic motivation, and coaching effectiveness. Furthermore, coaches who adopted a transformational leadership style inspired their followers to perform at their highest capacity by creating a positive vision, articulating how their vision could be reached, by setting high performance standards, leading by example, empowering their followers, and by developing leadership skills in their subordinates. In addition, it is suggested that transformational leadership can be trained and can provide a competitive edge by increasing athletic performance beyond expectation. Bass'

(1985) theory of transformational leadership will be used to examine the behaviours head coaches used to develop their head assistant coach.

## **Coach Athlete Relationship**

The 3 + 1 Cs model is designed to measure the relationship between coaches and athletes by examining the level of interconnectedness in their thoughts, feelings, and behaviours (Jowett & Lavallee, 2007). Specifically, Jowett and colleagues (Jowett & Chaundry, 2004; Jowett & Lavallee, 2007; Jowett & Meek, 2000) described the coach-athlete dyad as a reciprocal relationship where coaches' and athletes' thoughts, feelings, and behaviours depended on one another via three relational constructs: closeness, commitment, and complementarity. The emotional element of the coach-athlete dyad is measured by the level of closeness in their relationship. Closeness occurs when coaches and athletes have a mutual feeling of trust, respect, and liking for one another. Commitment represents the cognitive element of the coach-athlete relationship, and involves the coaches' and athletes' thoughts of attachment to one another and the intentions of maintaining their relationship. Finally, *complementarity* encompasses the behavioural element of the coach-athlete dyad, and involves the cooperative interactions between player and coach such as a coach calling plays and the players executing them. The 3 + 1 Cs model was designed to measure the relationship between coach and athlete. It is possible that it would also be applicable to the head coach-assistant coach relationship, since they need to trust and respect each other, to work together toward a collective goal, and to cooperate in their actions to ensure maximum productivity of their team.

Research investigating the 3 +1 Cs has examined players' and coaches' perceptions of their relationship (Jowett & Clark-Carter, 2006), their beliefs about how their relationship

worked (Jowett, 2003; Philipe & Seiler, 2006), and how the 3 Cs affected team cohesion (Jowett & Chaundry, 2004) and motivational climate (Olympiou, Jowett, & Duda, 2008). For example, Jowett and Chaundry studied 111 university team sport athletes and measured their perceived level of the 3 Cs with their coach and how it affected player's perceived level of team cohesion. Results indicated athletes who believed they had stronger relationships with their coaches on the 3 Cs perceived their team as more cohesive. Specifically, they felt unified towards their teams' collective tasks. Like team cohesion, coaches' motivational climate was related with team sport athletes' relationships with their coaches (Olympiou et al., 2008). Olympiou and colleagues had athletes of all levels of competition (e.g., recreational to international athletes) fill out questionnaires regarding their perceived motivational climate and their relationship with their coach on the 3 Cs. They found athletes who perceived their coaches created a climate that emphasized cooperation, learning, and effort (i.e., task involving climate) felt closer, more committed, and believed their relationship with their coach was more complementary than players who perceived their coaches stressed winning and competition amongst the team members (i.e., ego involving climate). Where the two aforementioned studies focused on athletes individual feelings about their relationship with their coach on the 3 Cs, Jowett and Clark-Carter (2006) examined athletes' and coaches' ability to perceive each other's feelings regarding the 3 Cs. Specifically, they looked at 121 independent sport coach-athlete dyads and evaluated their abilities to predict each others' feelings of closeness, commitment, and complementarity. They discovered that athletes were more accurate at describing their coaches' feelings concerning their relationship. Jowett and Clark-Carter suggested that because athletes were in a less powerful position, they may have attempted to better understand their relationship with

their coach in order to feel more comfortable and in control. In sum, the ideal coach athlete relationship should be complementary, close, and committed, and should emphasize cooperation, learning, and effort. As a result, coaches can foster a more cohesive team that feels unified towards the teams' tasks. Furthermore, players may be more accurate judges of the coach-athlete relationship because of their subordinate role in the relationship.

Other researchers have examined the 3 + 1 Cs model through the subjective experiences of coaches and athletes (Jowett, 2003; Philipe & Seiler, 2006). For example Jowett conducted a case study on one Olympic level coach-athlete dyad whose relationship had deteriorated. In her study the dyad stressed the importance of trust and respect and indicated the need to establish a level of closeness. However, both noted that there could be negative consequences if athlete and coach become too close to each other. For example, the coach indicated that a coach needs to establish a balance between being nice and being demanding. Furthermore, the coach indicated that the level of closeness was dependent on the sport season. He noted that during training they needed to be closer, but when the competitive season begun he had to pull away to allow his athlete to develop her autonomy. The coach athlete dyad also expressed negative consequences when they experienced lack of emotional closeness. For example, the athlete explained that after the Olympics she felt detached from her coach and which negatively affected her training and performance. The dyad also discussed co-orientation, specifically highlighting the importance of having shared knowledge and a shared understanding in their relationship. For example, the coach highlighted the importance of having his athlete involved in decisions regarding her training program. When the dyad did not agree on her training, the athlete indicated that her performance suffered. Finally, they discussed the complementarity of their relationship. Both athlete and coach felt it was important to have a reciprocal understanding and that the coach athlete relationship is one of "give and take".

Similar results were found in Philippe and Seiler's study of 5 five male swimmers from the Swiss national team. Philippe and Seiler conducted interviews with the swimmers and found they believed the coach-athlete relationship was an important element to their successful performance. Each athlete mentioned that feelings of respect, admiration, esteem, appreciation, and regard were requirements for an ideal working relationship. The swimmers also spoke about the importance of good communication with their coach and setting common objectives and goals. In addition, the swimmers discussed that coaches and athletes must be excepting of each others' good and bad qualities. Finally, they mentioned the importance of respecting each others' reciprocal roles. They described the coach is there to benefit their performance and they are there to listen to what the coach says. In sum, athletes and coaches talked about the coach-athlete relationship and felt that having a close, committed, and complementary relationship was important for maximizing athletes' potentials in training and in competition.

In conclusion, researchers have investigated the importance of the 3 Cs in the coachathlete relationship. Findings indicated that athletes' performance and perceptions of team cohesion were positively influenced by having a close, respectful relationship with their coach, where they worked together towards a collective goal. Furthermore, coaches fostered athletes' feelings of closeness, commitment, and complementarity by emphasizing cooperation, learning, and effort. Finally, researchers found that athletes were more accurate at evaluating their relationship with their coach than coaches were. The current study seeks to understand whether the same close reciprocal relationship exists between the head assistant

coach and their athletes. Furthermore, it is possible that the same relationship exists between head and assistant coaches where communication, commitment, collaboration, trust and respect for each others' roles will be important factors in developing the assistant coach, and will lead to more successful cohesive teams.

# Chapter 3

#### Methods

This chapter will highlight the qualitative methodology used in the current study. The participants, procedures, data gathering, and validity elements will be explained. The data analysis for this study followed the guidelines established by Côté and colleagues (Côté, Salmela, Baria, & Russell, 1993; Côté, Salmela, & Russell, 1995).

Coaching science research was heavily influenced by quantitative research designs in the past (Gilbert & Trudel, 2004a; Silverman & Skonie, 1997). However, the last few decades have seen a steady increase in the use of qualitative methodologies (Gilbert & Trudel, 2004a). Strean (1998) noted that sport psychology benefits from qualitative research because it provides a deep understanding of how people make sense of the world and context they live in. Furthermore, Strauss and Corbin (1990) claimed that qualitative methods could be used to better understand a phenomenon when little was known about a particular subject.

### **Participants**

According to Marshall (1996), an appropriate sample size in qualitative research is one that adequately answers the research question through data saturation. Data saturation occurs when new categories, themes, and explanations stop emerging from the data. Guest, Bunce, and Johnson (2006) noted that 6-12 participants were typically sufficient for acquiring data saturation. Patton (1990) suggested that participants should be purposely selected because qualitative research seeks to study in depth cases that are rich in information. Criterion sampling was implemented in order to reach a specific target population who had experienced the same phenomenon (Creswell, 2007). Criterion sampling involves selecting participants who meet a predetermined list of criteria. The current study selected 6 successful Canadian university football head coaches. The coaches were purposely

chosen based on 4 criteria. First, they were currently a head coach of a CIS football team. Second, they have been a head coach for a minimum of 5 years. Third, they had a career winning percentage over .500. Finally, they were recommended as an effective head coach by a panel of experts that included current and former head and assistant athletic directors and current and former head CIS football coaches. For their recommendations, the panel was asked to consider the accomplishments of head coaches on and off the football field.

Therefore, coaches were recommended for having student athletes who showed success in all areas of life (e.g., football, academic, business, and community). The criteria for coach selection were in agreement with Côté, Young, North, and Duffy's (2007) definition of expert coaches. According to Côté and colleagues, coaching involves more than just a successful win-loss record. Effective coaching involves acquiring knowledge and employing it properly when interacting with athletes in specific sport contexts.

The participants accomplished many milestones during their athletic and coaching careers. All reached elite levels in their athletic careers which ranged from playing football in the CIS to playing professionally. During their coaching careers, they were recognized with coach of the year awards and led their teams to provincial and national championships, including four who were head coaches of Vanier cup winning teams. Additionally, the participants were recognized for having football programs that produced student athletes who demonstrated proficiencies in both the classroom and their communities.

#### **Procedures**

The research team contacted eligible participants by phone or email with a recruitment script (Appendix C) after receiving ethics approval from our university Research Ethics Board. Those who were interested were sent a demographic questionnaire (Appendix

D) and a consent form (Appendix E), along with information describing the purpose of the study and the methods of data collection. Prior to the interview, the interviewer built rapport by explaining the process of the interview and by discussing influential coaches of their past. Coaches were interviewed in person by the primary researcher for a period of 1 to 2 hours at a location and time of their choosing. Each interview was coded to ensure the anonymity of participants. Specifically, coaches' names and any information that indicated participants' identity such as their location, affiliation to schools, or the dates of their achievements were altered or excluded. Prior to data analysis, the participants were sent hard copies of their interview transcript and were given the opportunity to modify or delete any part of the interview without penalty.

# **Data Gathering**

This study collected data using a qualitative interview technique. Interviews have been a prominent method of data collection in qualitative studies (Biddle, Markland, Gilbourne, Chatzisarantis, & Sparkes, 2001). The types of interviews range from structured interview formats (e.g., pre-established questions and limited response categories), to unstructured formats (open discussion of a topic with few questions in mind) (Fontana & Frey, 1994). The current study used a semi-structured open-ended interview format. This type of interview technique has been employed by many researchers as the main technique for studying expert coaches (e.g., Bloom, Durand-Bush, Schinke, & Salmela, 1998; Côté et al., 1995; Vallée & Bloom, 2005), likely because they are similar in style to an ordinary conversation with the interviewee doing most of the talking (Lincoln & Guba, 1985). This allowed the interviewer to focus the topic of discussion but allowed the interviewee the freedom to answer openly without restrictions (Rubin & Rubin, 1995). It was advantageous

for interviewees to answer without restriction because it allowed them to dictate which subject matter that was most important to them.

#### **Interview Guide**

An interview guide (Appendix F) was created by the primary researcher and members of the research team with extensive knowledge of leadership and coaching. This guide was used for each participant in order to ensure consistency. The first section contained opening questions intended to introduce the topic and to initiate discussion (e.g., Can you describe your evolution into coaching?). The second section addressed the main questions concerning why the head coach selected their head assistant coach and how they developed him once selected. This section covered information based on Bass' (1985) theory of Transformational Leadership, Chelladurai's (1978) Multidimensional Model of Leadership, the 3 Cs + 1 model (Jowett & Lavallee, 2007), and Horn's (2002) Working Model of Coaching Effectiveness. Finally, the third section contained concluding questions that allowed participants the opportunity to include any information they believed was relevant. Main, probe, and follow up questions were asked (Rubin & Rubin, 1995). Main questions allowed participants to describe and elaborate on their knowledge pertaining to the topics of interest in the study (Patton, 2002). Probe questions increased the richness and depth of responses by allowing the participants to further develop the areas considered relevant. Finally, follow up questions provided the researcher the ability to clarify areas of the participant's knowledge and experience that may have been overlooked (Rubin & Rubin, 1995).

# **Data Analysis**

The goal of analyzing open ended interviews was to create a system of emerging categories from unstructured data. Since the categories emerged from the interviews rather

than pre-existing patterns, the categories were formed using an inductive approach (Côté et al., 1993; Côté et al., 1995). This approach will be explained following the guidelines outlines by Côté and colleagues (Côté et al., 1993; Côté et al., 1995).

Each interview was transcribed verbatim making minor edits (Côté et al., 1995). For example, names of participants were changed to code numbers to ensure the confidentiality of each participant. Each interview was analyzed line by line and broken down into meaning units. Tesch (1990) described meaning units as a segment of text composed of words, sentences, or entire paragraphs that convey the same idea and relate to the same topic. Meaning units were organized and stored using Nvivo7, a computer software program designed specifically for qualitative data. Each meaning unit received a tag that was relevant to its content. Once tags were assigned to each meaning unit they were examined for similarities and grouped together forming larger groups called properties (Côté et al., 1995). Next, each property received tags on the basis of commonalities shared by the meaning units. Finally, each property was examined and grouped into similar units called categories. This was done in a comparable fashion to the creation of properties. However, when grouping categories it required a higher and more abstract level of analysis (Côté et al., 1995). In addition, the data was examined until saturation of the information occurs. This occurs when no new tags, properties, or categories emerge at each level of classification from the inductive analysis. This process of analysis has been used in the past to evaluate expert coaches' knowledge and experience (e.g., Carter & Bloom, 2009; Cregan, Bloom, & Reid, 2007; Wilson, Bloom & Harvey, 2010).

## Validity

Qualitative researchers are required to implement strategies in order to minimize the potential misinterpretation or misrepresentation of data (Yardley, 2008). Moreover, Yardley described validity as an attempt to enhance the accuracy of the findings described by both the participants and the researcher. This section will include four different techniques used by the research team to enhance the validity of the study.

Sensitivity to Context. Yardley (2008) noted there are numerous ways a study can accurately capture the context of what it is studying. In the current study, the research team created an interview guide using existing relevant theoretical and empirical literature. Furthermore, the interview guide captured the participant's perspectives by incorporating open ended questions which allowed participants the freedom to communicate what was most important to them.

During the analysis of the data, sensitivity to context was created by ensuring that the categories and meanings were not imposed by the primary researcher by *comparing* researcher's coding and participant feedback (Yardley, 2008). Comparing researcher's coding is an external check of the research process that involved the triangulation of coding between the two coders (Yardley, 2008). This ensures that the analysis is not restricted to the perspective of the primary researcher and that the data is understood similarly by others. The current study used an impartial graduate student studying sport psychology. This individual was familiar with coaching theories and literature and had tremendous experiential knowledge in football. He played five years of CIS football, spent one year in a professional football league in France as a player/coach, and is a current assistant coach in the CIS.

Before the peer analysis occurred, the research team coded the 6 coach interviews into individual meaning units along with a list of all the tags. Next, 25% of the meaning units were randomly generated by the research team and provided to the peer reviewer. Finally, the peer reviewer was instructed to label the 25% percent of meaning units presented to him using the tags to best of his knowledge. Before he began, he was provided with a brief description of each tag. Throughout this process, the peer evaluator was free to ask questions regarding the clarification of the tags.

Of the 167 meaning units, the peer evaluator accurately matched 133 of the corresponding tags (80%) to those identified by our research team. The reasons behind the tag selection of the 34 incorrectly labeled tags were discussed. The majority of disputed tags were a result of lack of clarification and description of the tags. For example, the following tag was incorrectly labeled as (Athletes - football + whole person).

We know at the end of the day that very few of our athletes are going to play pro football. Very few and it is short lived. I didn't get a gold watch after seven years. They said goodbye, see you, and that's it. They don't understand that. They just look at the glamour. They don't understand what really goes into it, and how very few of them are going to get the chance anyway. So if we can get the rest done and teach the core values required for success. Then they have tools, they have some tools in the tool chest for life, and life's experiences. They should be able to take things on and handle them in appropriate manners.

The peer reviewer initially believed the tag meant developing athletes as people through football. The primary research clarified that (Athletes - football + whole person) was reserved for quotes speaking about developing football skills simultaneously with developing them as people. After discussion, the peer reviewer agreed to change the tag to (Athletes - character development).

Furthermore, it was explained that when a tag began with (AC), it indicated how the assistant affected and related with the team. On the other hand, when a tag ended with (AC)

it was specific to the experiences head coaches provide/support for their assistant coaches to foster their knowledge and career development. The reviewer identified the following quote as (Increased responsibilities - AC).

Another thing my assistant coach does, because we don't have a fulltime strength and conditioning coach he plays a role in that area. He has gone to various resources to put together a program based upon the facilities we have here within the time frame and time structure that he has. He follows up to the degree that he can. You know, if he's in Calgary recruiting, it's kind of tough to be in both places. He does play a role in the off season relative to the development of our players.

The reviewer thought (Increased responsibilities - AC) was for the additional responsibilities of the assistant coach. Upon clarification, he agreed to the tag should be called (AC- practice duties).

Following the tag clarifications, 26 of the 34 incorrectly defined tags were agreed upon and remained unchanged. For the remaining 8 tags, a consensus between the primary researcher and the reviewer was reached and changes were made. The reviewer's experiential knowledge influenced the changes made by helping clarify the context of these 8 meaning units. For example, the following quote was labeled by the research team as (Other university camps - AC). This tag is used for meaning units where the head coach talks about sending his assistant to other university camps to develop his assistant's knowledge.

Well when developing my assistant it is important for them to go to camps where they are given a practice plan. Normally, when you go to coach camps you kind of just stand there and look at what is going on. For me the practice plan is so important. It's important for him to see how they develop it.

After reading this meaning unit the reviewer said since the head coach was talking about CFL camps that (CFL camps – AC) would be a better tag. He described that another university would not give a competing assistant coach their practice plan. When the primary

researcher reviewed the interview he discovered the reviewer was correct and made the change.

For the next step of the review process the research team created properties by grouping tags with similar meanings and created definitions for each property. Next, the reviewer was provided with a list of properties and their definitions and was asked to place all 61 tags within each property. The reviewer correctly indentified 60 of the 61 tags. The one discrepancy was quickly agreed upon.

The final step of the peer review process involved providing the peer reviewer with a list of categories with their associated definitions. The reviewer was instructed to place each of the 11 properties in the categories he deemed most appropriate. The peer reviewer placed all 11 properties in the category that corresponded with the research team's original choice. As a result the reviewer yielded an inter-rater reliability of 100% for the final step.

Participant feedback is a method used to establish the credibility of the findings and interpretations by involving the participants in the data analysis process (Yardley, 2008). Specifically, participant feedback allows participants to correct any errors and to challenge the interpretations of the researcher ensuring that their views are not misrepresented. It occurred in three ways for the current study. First, at the end of each interview the participant was allowed to add, modify, clarify, or exclude any comments or ideas made during the interview. Second, each participant was sent a full verbatim transcript of the interview and was invited to add, modify, clarify, or exclude any comments or ideas made during the interview. Finally, each participant was sent a summary of the results and was asked to state any concerns, questions, or comments regarding the findings. Participant feedback allowed participants the ability to provide their voice in the research process (Yardley, 2008).

Commitment and Rigour. Commitment and rigour involves ensuring an in depth engagement with the topic, applying sound methodological competence, and completing a thorough data analysis (Yardley, 2008). The research team ensured commitment and rigour by carefully selecting participants based on criteria relevant to the research question.

Furthermore, the primary researcher underwent training in qualitative interviewing beginning with reading material proposed by different qualitative researchers (e.g., Patton, 2002; Rubin & Rubin, 1995; Sparks, 1998). In addition, the researcher developed interview skills by conducting pilot interviews under the supervision of an experienced interviewer. The pilot interviews were videotaped and reviewed with the experienced interviewer, who provided feedback on the researcher's interview technique and the interview guide. Moreover, at the end of each pilot interview, participants were encouraged to provide their feedback on the format and questions of the interview. Finally, the data analysis followed detailed guidelines set forth by Côté and colleagues to ensure the quality of the interpretations (Côté et al., 1993; Côté et al., 1995).

Coherence and Transparency. The research team created coherence and transparency by providing a detailed account of the procedures undertaken during data collection and analysis. For example, a paper trail of the analysis was kept which included themes, sample quotations, and tables representing each step of the analysis. Finally, the primary researcher's biases were bracketed using a technique called *researcher reflexivity*. *Researcher reflexivity* is the process of reflecting on the researcher's possible position, biases, or assumptions that may impact the research process (Kleinsasser, 2000). In the present study, the researcher had participated in varying levels of team sports, including high school football. Furthermore, the researcher had worked a full season as a sport psychology

intern for the McGill men's hockey team and another full season with the McGill men's basketball team. Therefore, the researcher was aware of the culture and language involved in team sports at the university level. In addition, the researcher had read a number of expert football coaches' biographies and had gained insight and knowledge pertaining to these coaches experiences. Together, these experiences may have shaped the research approach and interpretation of the results.

Impact and Importance. Impact and importance is a principle for assessing the quality of research that demonstrates the usefulness of the study (Yardley, 2000). The current study presented data on the lived experiences of some of the country's most successful university head football coaches' experiences selecting and developing their head assistant coach. Therefore, the results will directly impact head coaches by providing guidelines for selecting their head assistant coach and establishing successful football programs. Furthermore, this study provides information for assistant coaches on the knowledge and experience they need to acquire to be competitive when applying for an assistant coaching position in university sport. Finally, these results add to the coaching science literature by providing information about assistant coaches, which remains an understudied population in coaching science literature.

# Chapter 4

#### **Results**

This chapter will present the results of the six interviews conducted with Canadian university head football coaches. First, a brief summary of the nature of the data will be provided including a description of the findings that emerged from the data. In addition, the three higher order categories that emerged from the analysis, selection of the head assistant coach, coaching staff duties, and development of assistant coaches and athletes will be presented.

#### **Nature of Data**

The six interviews resulted in a total 671 meaning units. From the 671 meaning units, 61 tags emerged. Table 1 (see Appendix G) presents an alphabetized list of the topics discussed by the participants. The number of meaning units discussed by each participant varied from 97(C3) to 135(C5). As a result of the semi-structured and open ended nature of the interviews, it is not unusual for the interviews to vary in the number of meaning units. A higher number of meaning units does not necessarily imply that better information was provided by the participant. Some coaches may have expressed an idea more succinctly than others or some may have provided more examples or stories to support their ideas. For instance, C1 discussed the motivational feedback his assistant provided athletes more than the other coaches. It may be that the other coaches' assistant played less of a motivating role on their team or that these coaches didn't believe athlete motivation was important. Similarly, C4 spoke in detail about his relationship with his support staff more than any other participant. In addition, not all themes were discussed by each coach. Therefore, the frequency of each tag from the total sample ranged from 2 to 30. This variation may account for the importance of these topics to the coaches. For example, the tag *personal relationships* 

- AC was frequently cited by the participants. This may reflect the importance of head coaches' work and personal relationships with their assistant coaches or it may have been a direct response to a question asked (e.g., Describe your relationship with you assistant coach). On the other hand, tags such as AC - personality - humour and support staff - guest speakers were rarely discussed by the coaches. These two meaning units were discussed by two different coaches and were unique to the specific coach that discussed them. Through an inductive approach the 61 tags were organized into 11 properties based on their similarity of content and are shown in Table 2.

The final stage involved grouping the 11 properties into three higher order categories following the same inductive procedure that was used in the previous level. The three categories that emerged from the data were *selection of the head assistant coach, coaching staff duties,* and *development of assistant coaches and athletes.* The 11 properties grouped into the three categories are shown in Table 3.

Properties and Tags	<b>C</b> 1	<b>C2</b>	<b>C3</b>	<b>C4</b>	<b>C5</b>	<b>C6</b>	Total
Assistant Coaches' Hiring Criteria	6	4	11	1	6	11	38
AC - age	1	1	1	0	0	2	5
AC - athletic experiences	1	2	5	0	0	4	12
AC - previous coaching experiences	2	0	0	0	0	3	5
Athletic experiences -> coaching success	2	1	5	1	2	2	13
AC - financial challenges	0	0	0	0	3	0	3
Assistant Coaches' Personality							
Traits and Characteristics	4	13	10	6	12	6	51
AC - personality - values	0	3	3	2	0	3	11
AC - loyalty	0	4	1	2	2	2	11
AC - personality - leadership	0	2	2	2	0	0	6
AC - personality - multiple characteristics	2	1	2	0	0	0	5
AC - personality - organization	0	0	1	0	3	0	4
AC - personality - work ethic	0	0	0	0	2	1	3
AC - personality - attitude	0	3	1	0	5	0	9
AC - personality - humour	2	0	0	0	0	0	2
<b>Assistant Coaches' Job Requirements</b>	6	7	8	12	6	10	49
AC - administrative duties	2	4	3	5	2	5	21
AC - practice duties	2	1	3	6	2	3	17
AC - competition duties	2	2	2	1	2	2	11
Assistant Coach - Coaching							
<b>Athletes Directly</b>	25	16	17	17	12	13	101
AC - personality - knowledge	2	1	5	6	4	4	22
AC - feedback - motivation	14	5	0	0	0	0	19
AC - personality - coaching style	2	0	2	0	4	3	11
Feedback differences with AC	3	0	2	3	0	0	8
AC - feedback - instruction	0	4	0	0	0	2	6
AC - personality - communication	0	0	4	1	0	0	5
AC - athlete relationships	4	6	4	7	5	4	30
<b>Career Development of Assistant Coach</b>	7	17	15	12	10	15	76
Increased responsibilities - AC	0	8	1	4	2	7	22
Autonomy - AC	0	3	6	2	3	0	14
Guidelines - AC	0	4	3	0	2	0	9
CFL camps - AC	4	0	0	2	0	2	8
Other university camps - AC	1	0	1	2	0	3	7
Feedback to AC	0	0	3	0	2	1	6
Conferences - AC	1	0	0	1	0	2	4
Coaching certification - AC	1	0	1	0	1	0	3
Literature - AC	0	2	0	1	0	0	3

Table 2 (continued)

Properties and Tags	<b>C</b> 1	<b>C2</b>	<b>C3</b>	<b>C4</b>	C5	<b>C6</b>	Total
Head Coaches' Acquisition of							
<b>Knowledge and Career Experiences</b>	10	6	6	14	24	12	72
Coaching influences - other coaches	3	2	2	4	11	4	26
Personal coaching progression	2	1	2	5	10	3	23
Coaching influences - non coaches	0	2	0	0	0	1	3
Personal coaching progression - education	3	0	0	5	3	3	14
Personal athletic experiences	2	1	2	0	0	1	6
Team Vision	9	16	8	19	25	6	83
Team potential	7	3	3	5	7	3	28
Team vision	0	3	1	2	9	2	17
AC - vision	2	3	1	7	4	0	17
Personal leadership style	0	3	2	2	4	1	12
Support staff - vision - shared	0	4	1	3	1	0	9
Recruiting	14	6	4	2	7	14	47
AC - recruiting - importance	7	0	1	0	4	6	18
AC - recruiting - social	1	0	2	2	0	4	9
AC - recruiting - talent identification	2	1	0	0	2	2	7
Recruiting - importance	1	2	1	0	0	1	5
Support staff - recruiting	0	3	0	0	1	1	5
Recruiting - admissions	3	0	0	0	0	0	3
Head Coaches' Relationships	5	9	6	11	21	12	64
Personal relationships - AC	3	6	4	4	6	7	30
Personal relationships - athletes	1	1	1	4	5	3	15
Personal relationships - support staff	1	2	1	3	10	2	19
<b>Support Staff - Influence on Team</b>	6	7	8	1	3	6	31
Support staff - athlete relationships	1	0	2	1	2	0	6
Support staff - guest speakers	0	2	0	0	0	0	2
Support staff - knowledge	0	1	0	0	0	4	5
Support staff - personality	1	3	6	0	1	2	13
Support staff - tasks	4	1	0	0	0	0	5
<b>Athlete Development</b>	6	20	4	16	9	4	59
Athletes - character development	1	6	0	7	2	0	16
Athletes - feedback - individual	0	4	2	0	1	0	7
Athletes - football + whole person	2	3	2	3	0	4	14
Athletes - leadership	1	6	0	5	1	0	13
Athletes - skill development	2	1	0	1	5	0	9
Total	98	121	97	111	135	109	671

Table 3
Categories and Properties with frequencies as expressed by each participant

Categories and Properties Selection of the Head Assistant Coach	C1 29	C2 39	C3 35	C4 40	C5 66	C6 35	Total 244
Head Coaches' Acquisition of							
Knowledge and Career Experiences	10	6	6	14	24	12	72
Team Vision	9	16	8	19	25	6	83
Assistant Coaches' Hiring Criteria	6	4	11	1	5	11	38
Assistant Coaches' Personality							
Traits and Characteristics	4	13	10	6	12	6	51
<b>Coaching Staff Duties</b>	51	39	37	32	30	44	228
Recruiting	14	6	4	2	7	14	47
Assistant Coaches' Job Requirements	6	7	8	12	6	10	49
Assistant Coach - Coaching							
Athletes Directly	25	16	17	17	13	13	100
Support Staff - Influence on Team	6	7	8	1	3	6	31
<b>Development of</b>							
<b>Assistant Coaches and Athletes</b>	18	46	25	39	40	31	199
Career Development of Assistant Coach	7	17	15	12	10	15	76
Athlete Development	6	20	4	16	9	4	59
Head Coaches' Relationships	5	9	6	11	21	12	64
Total	98	121	97	111	135	109	671

#### **Selection of the Head Assistant Coach**

This higher order category included 244 meaning units and represented 36% of the total data analyzed. This category begins by describing the head coaches' evolution into coaching and how they acquired their coaching knowledge. From their coaching experiences, head coaches formed a coaching vision and developed philosophies concerning the development of student-athletes. Head coaches hired a coaching staff to assist them in reaching their vision, and explained the personality characteristics and experiences they looked for when selecting their head assistant coaches.

Head Coaches' Acquisition of Knowledge and Career Experiences. This property provided background information about the people and experiences that influenced their careers prior to becoming head coaches. It is important to understand the career progression of head coaches because it provides insight on their experiences that may have influenced the selection of their assistant coach. Head coaches discussed their athletic careers, experiences as assistant coaches, and the formal education they received.

The majority of participants described playing football from a young age and the progression of their athletic careers, which ranged ranging from playing in the CIS to playing professionally. Four of the participants described influential figures during their athletic careers:

I had a great high school coach and he was one of the people I really admired. You know he had a certain way about him. He was a great teacher and a great guy. He was demanding and he fit, and he was a mentor, a leader, a charismatic guy. He was the kind of guy that you respected. He commanded a high level of respect and I really wanted to do well for him. You wanted to get the most out of yourself for him and I wanted him to know that I was giving it my best. (C5)

I was influenced during my playing career by a teammate. He is this personable smiley faced guy on the camera, and you don't appreciate him from his camera persona just how intelligent he is. He was a student of the game, was extremely

motivating, and was able to put things into perspective. I leaned on him as a player to get through a lot of things. (C6)

Following their athletic careers, coaches participated in formal education programs by acquiring university degrees and coaching certifications. Five of the six coaches held a bachelor's degree and three completed a master's degree:

After I quit playing football I started to coach and realized how much I enjoyed it .I knew that the only way that I was going to go anywhere as a coach was to go back to school. I did at 30, about ten years after high school. I had to do a year of prerequisites and then three years beyond that to get a physical education degree. It was all in order to become a coach. (C1)

Following my experience as an assistant coach I ended up doing a master's degree in sports management. The opportunity was presented to me while I was recruiting. I had met people and did some camps and one of the guys I met offered me a graduate assistant position. So, I became a graduate assistant coach at that university for two years until this job came up. (C4)

Interestingly, the majority of the coaches participated in the Canadian coaching certification program but placed little emphasis on its importance:

I participated in the National Canadian Coaching Program to a point. I didn't complete all of the levels because I found that within a very short time I thought that I could easily be teaching this course. So I did get a couple, a level three technical and a level two theory. (C5)

While completing their formal education, five of the participants also described gaining coaching experience working as assistant coaches:

When (name of coach) was hired as a head coach I got hired as his offensive coordinator and spent three years learning from him and we won a national title together. My current head coaching position became available at that time and I applied and got it. I have been here since. (C6)

I started as a full-time assistant coach under one of the last part-time head coaches. You may be surprised to know but a young assistant can wear many hats. First, I was the full-time assistant football coach. Therefore anything that needed to be addressed about football, the athletics department, the school of physical education, or anything on campus came across my desk. I would filter everything and pass on what was needed to the head coach. Next, I was the offensive coordinator and the recruiting coordinator of the team. Also, for a time I was the strength and conditioning coach,

and I was even responsible for getting the half-time concessions organized. I mean here I am coaching a game and I am still responsible for how many hotdogs are being sold at halftime and how many beer cups are needed. Needless to say I gained a lot of experience from that job. (C5)

During their time as assistant coaches, participants noted the importance of the mentorships they received from their head coaches. Three coaches described these mentorships as the most influential learning experiences of their coaching careers:

I was influenced most by two coaches who gave me tremendous opportunities as an assistant coach and taught me two different styles, probably the exact opposite of one another. The first coach kind of operated under the old style of coaching. He was demanding and hardnosed, but was very effective. The second was more of a player's coach in terms of delegation. He was a big delegator compared to the first coach who wanted his imprint on everything that we did. Those two gentlemen would be the biggest influences on me and my career. (C3)

**Team Vision.** The previous property described the experiences and people that shaped the participants' coaching knowledge and careers when they were athletes and assistant coaches. Once hired as head coaches, the participants were required to create their own vision and coaching philosophies. The current property highlighted the participants' vision which included their beliefs about the current state of their team and their goals, and coaching philosophies about football. Furthermore, this property illustrated how their coaching staff fit within their vision.

The head coaches described the potential of their current football team. Two of the six coaches were rebuilding their teams, two had competitive teams, and two were ranked in the top tier of university football in Canada:

Compared to teams in the past we had maturity issues this year. I talk about maturity and I mean their playing experience not necessarily age. We had a very young team in terms of playing experience. I thought they played hard. All of the coaches this year were amazed that we never had any bad practices. Bad practices usually stem from the coaches anyway. We found the team to be very accountable this year. We feel that we have great young men and that they are going to be an outstanding group next year. (C2)

In terms of my team's potential, we are defending a national title and have had mild turnover in our seniors with graduation. If our quarterback comes back next year I think we will be ranked probably number one in the nation. So we are as healthy as we have been as an organization and obviously have lots of work to do. We have discovered that we can compete at a national level and that is a great first step. Now we need to do it consistently. (C6)

Head coaches described how their head assistant coaches fit within their vision and that it was important for their assistants to share their goals and coaching philosophies:

My assistant had to compatible with my vision and how I run the team. It goes back again to values and behaviour and stuff like that. He has to be compatible with what I do and how I do it. (C4)

You want an assistant who loves it, believes in your philosophy, and can function in your system. You know someone who just believes we can get there. Someone who doesn't need to be convinced every step of the way. You need to be convinced that we always have a chance and I think you need to be just a little bit of a dreamer. Those are really the key elements. (C5)

Similarly, the participants emphasized that their coaching staff also had to be united and share their vision:

I try to surround myself with people who have personalities as close to mine as possible, but certainly they are never exactly the same. Everybody does it a little bit different. Some use humor, or some with whatever, or whoever they are. But the main message is important, and we all need to be sending the same message. (C3)

When that door opens and everybody comes out you are a united front. Your coaching staff is a united front and everybody has to be operating under the same vision. (C5)

Assistant Coaches' Personality Traits and Characteristics. In the previous property head coaches discussed how their assistant coaches fit within and shared their coaching philosophies. The current property addressed the specific type of person head coaches looked for when selecting their assistants and the qualities they possessed that made them an appropriate fit.

Head coaches wanted good people as their assistant coaches who had a strong set of values that cared about the future of their athletes:

It is important for me that my assistant is someone who believes that we have to put the student-athlete ahead of our personal goals and aspirations. Having a guy here who only cares about winning a championship and really doesn't care if somebody goes to school, or what somebody does away from here that could embarrass the program. I think you are destined for failure if you have those kinds of people around. (C2)

Basically assistant coaches have to be good people and have to want to work with kids. I don't care about experience and what you know. I will probably change their minds on what they know as far as techniques and system once I am done with them anyways. So you need to want to work with kids. (C4)

The participants often discussed the importance of loyalty when selecting their assistant coaches. Five of the participants required assistant coaches who were loyal to themselves and the football program as a whole:

Loyalty is the biggest thing when hiring a coach because a lot of stuff that we do is confidential. How we run our team. I mean it is not war but you keep your secrets for yourself. How you do things technique wise and other tactical aspects need to remain secret. Basically I was looking for loyalty and integrity. (C4)

Your assistant's loyalty to the program I would say is incredibly important. I want my assistant to be loyal to the institution and to do what is best for the football program at all costs. To be loyal to me personally is great, but it is secondary to the program and the greater good of our school. (C6)

Two of the participants described loyalty as a two way street and noted their loyalty to their assistants was equally as important:

Loyalty is an important value for assistant coaches. Loyalty goes both ways. You know, if our offensive line doesn't do well, I can't go to the papers and say well my assistant didn't do a good job coaching the offensive line. I have to have his back and he has to have mine. It needs to be that way. The players also have to understand. (C2)

I think loyalty is very crucial and it goes both ways. I think my assistant knows that he can count on me. I know what his role is, and I never miss an opportunity to compliment him in public so that he knows he is appreciated. That is one of the things about the head assistant is that they are putting their lives into it and it is always the

head coach that seems to get the bonuses and the headlines. So I believe that when things go well, they deserve credit. (C5)

In addition to being loyal, head coaches wanted their head assistants to possess strong leadership skills and a positive attitude about their team. Several participants noted it was essential that their assistants had the maturity and character to do what was right for the athletes:

My assistant definitely affects team dynamics. He is a leader. He is the leader of the offense. We have 90 to 100 kids on the team, so he has got 40 to 50 kids on offense that look to him for guidance and leadership. (C3)

His ability as a coach starts with his character, his commitment to the program, and his leadership skills. A football team is not much different than a family. When mom says 'no' you go and see dad. In football if you want a 'yes', well often assistant coaches are there to be liked, but he will say 'no'. It is not a popularity contest. The coaches want to be liked whether they are part-time guys or whatever. They like to say 'yes' when players ask if they could do this or that, but when it comes down to saying 'no' they tell the player to go see the head coach. With my head assistant coach it stops there, he has that capacity to say 'no'. He has the understanding that you have to make the right decisions for the program and not just the ones that will make you popular with the kids. (C4)

Assistant Coaches' Hiring Criteria. Whereas the previous property encompassed the type of person head coaches looked for in their assistants, this property accounted for the life experiences head coaches valued. Specifically, coaches spoke about their assistants' experiences in football as players and as assistant coaches.

Three coaches noted their assistants' athletic experiences provided them with valuable football knowledge:

My assistant's experience as a player and his great functional intelligence for football made him a no brainer as far as a football coach. (C2)

His athletic experience was very important for his ability to coach. I think without that experience it would have been impossible for him. His playing experience was the only thing he had to draw from. He was able to take what he learned as a player and developed an offense, coached an offense, taught an offense, and managed an offense so that we would be ready each Saturday. He was able to do this strictly by

using his athletic experience. We could sit and talk about it and draw it up on a white board, but if you haven't experienced it. As a first-year coach, well, I think you would have no chance. So it was really important. (C3)

My assistant is an avid touch football player which is something that helps him scheme wise in the passing game. He also played quarterback which is the hardest position to play. He understands what you can do and cannot do. He doesn't pretend that a certain read is possible when in fact there is no way of predicting what will happen. He understands that and if you look at the quarterbacks he has worked with. You will see they always rank amongst the most efficient passers in the nation. Therefore, given that we build a system around the strengths of the athletes we end up with, his athletic background is absolutely critical for what we are trying to do. (C6)

In addition, one coach inferred how his assistant would coach based on his behaviours as a football player:

I knew the way my assistant coach played and believed he would look to develop the same kind of athlete. I knew he would develop the kind of player that we would ultimately be able to count on. He would coach kids the way that he played, and he played tough. (C1)

Interestingly only two of the six coaches spoke about wanting their assistants to have previous coaching experience. A possible explanation for a lack of emphasis on coaching experience was the value they placed on having young assistant coaches. Two of the coaches discussed how having a young assistant was beneficial because they had more free time to dedicate to football and could relate well with their athletes:

I thought it was a great thing that my assistant was young. I mentioned continuity in the program and our University being able to retain their most talented and brightest. I felt that definitely when retaining the brightest and the best that it is going to be a really young guy or it is going to be a guy who is all done his career and is more on the retired side. It is tough to retain people who are working professionals and creating jobs for them. We don't get rich and famous coaching right, so when you engage somebody it is usually right at the beginning of their career or right at the end. So I thought it was a perfect fit. (C6)

As a result of my age; being that I am really old. Having a young guy is good. He probably has a better understanding of today's youth and can mix with them. (C1) Another possibility may lie in the cost of hiring an assistant with a decorated coaching career, particularly at the university level:

You have to understand that you are not always free to hire the people you want in Canada. Sometimes you are going to be influenced by the financial resources that you are given. Sometimes you have to be satisfied with getting the best you can get with what you have. (C5)

### **Coaching Staff Duties**

This higher order category included 228 meaning units and represented 34% of the total data. The previous category illustrated why the participants selected their head assistant coaches. Once selected, the head assistant coaches had a significant influence on their team's success. This category described the assistant coaches' main roles and responsibilities which included recruiting, managing a specific unit of the team, and interacting with the athletes. Furthermore, this category discussed the influence the support staff had on football teams.

**Recruiting.** In order to build a successful football program coaches need great athletes, hence the importance of recruiting in CIS football. Our participants described the major roles head assistant coaches occupied in recruiting. Finally, they also alluded to the role of the entire coaching staff in recruiting.

All of the participants discussed the importance of recruiting with some saying it was the single most important task in CIS football:

Right now we are in the recruiting process which is the most important time of the year. If you don't win now you are not going to win in the fall. (C3)

Honestly, as a head coach at this level your priorities are recruiting, coaching, recruiting, fundraising, and then recruiting. Every second thought had better be about recruiting and making good impressions on young athletes because we are all pretty smart at the Xs and Os and it really comes down to who has the best kids. (C6)

As a result of its importance, head assistant coaches spent a significant portion of their time recruiting new athletes. Head coaches described that recruiting involved two

major skills: talent identification and the ability to connect with athletes while selling their program:

Your head assistant has to be good on some level of recruiting. On a staff some guys are just natural in social situations. They are great talkers and can charm the life out of the mothers and the fathers and all the rest of it. Then you have guys who are just great at scouring names. You need to complement each other because there are different aspects of the recruiting process. It is rare to get someone who is an ace at all of them. Your head assistant better be excellent at one of them. (C5)

Four coaches discussed the exact roles of their assistants in organizing the recruiting process and identifying potential athletes:

My head assistant's role in recruiting is organizing everything. We have a program that he uses to do all of it. He can see hundreds of recruits and all their information. Then, when he finds the right recruits he assigns which coach is speaking to each recruit on a given week. (C4)

I have no problem with the personal part of the recruiting. I have no problem closing, getting involved with the family, and finding out what he wants to do. So it is great that my assistant is good at the research. He finds out who they are, where they are, and what their marks are. It is important for me to have someone who is excellent at that. (C5)

In addition to finding the best athletes, participants described how their assistants needed to have strong social skills in order to connect with recruits and their families:

To recruit effectively you need great people skills. Kids have to like you and trust you. You also have to work really hard on follow-ups and staying connected with these kids. My assistant does that very well. (C1)

Once we have decided who we are going to recruit we have to create a personal relationship. My assistant head coach is hands on with a lot of the offensive recruits. He will be in a lot of the living rooms talking to moms and dads. That is a huge part of his job. (C6)

Finally, three coaches noted recruiting was so important that they had their entire coaching staff involved in the process:

Recruiting is a seven-headed monster and every full-time member of our staff is heavily involved in recruiting. If you saw any of them operating on any given day you would ask yourself if they were my recruiting coordinator. That's a good thing

because the young assistants here understand that recruiting is the lifeline of the program. (C5)

Assistant Coaches Job Requirements. In addition to recruiting future athletes, head assistant coaches were responsible for preparing their athletes for competition and held important coaching roles leading up to and during football games. This property discussed the job requirements of head assistant coaches during practices and games. Furthermore, this property described the administrative duties required of head assistant coaches.

Coaches acknowledged their head assistants were given full responsibility for a major team unit (e.g., offense, defense, or special teams). As a result, their assistants spent significant time planning and coordinating practices:

The prep work for practice is big. At the end of every practice we come together immediately in the staff room and talk about what we just did, about personnel, and how we felt practice went. From this, my head assistant and I create a practice plan for the next day. So we go through it at every position and we have a practice schedule that we break down to the minute. We use a clock and have a horn. It is scheduled and organized well so that everyone knows what they have to do and where they have to go next. (C3)

The assistant head coach is responsible for the practice plan and printing copies and getting it to each of the coaches. He is responsible for meeting with the offensive staff and giving them direction of what he needs throughout the practice. He is responsible for supervising our film coordinator to make sure that film is up and in the right place after practice. He makes sure that the positional coaches know where they need to be on each drill for the film. Then, at the end of the day, film sessions and post practice feedback are all his for the offensive side of the ball. (C6)

On top of preparing their athletes for competitions through practices, head assistant coaches were responsible for coaching athletes during games. In order to coach, assistants created game plans and called plays:

My assistant prepares the game plan. He takes information from all the coaches and he pulls it all together. Our game plans can be 25 to 30 pages long. It not only consists of our plays but also had the statistics of what our opponent has done in the

last six or seven games. So you have to watch all of the films and break down all their tendencies. All the coaches give some input into that, but he has to pull it all together. He has to figure out all the percentages and relay that back to us. (C2)

As a defensive coordinator, my assistant coach makes every defensive call. So while the defense is on the field he's the guys signaling to 12 guys what our next defensive call will be following every sequence of defensive plays. So when the defensive kids come and sit on the bench he will quickly huttle with the other defensive coaches to get a sense for what they saw from talking to the person. Then, he will take that information and decide what is best for our defense. (C1)

Although assistant coaches main roles were focused on the performance of their teams during football games, the participants noted that their assistants had other important duties off the field. This included creating and maintaining relationships with alumni, fundraising, organizing football camps, and handling team needs:

My assistant purchases all of our team's training equipment and is in charge of organizing our football camp for the kids. He also runs the football coaches clinic. Also because he is the strength and conditioning guy he has to reserve the gyms and rooms and stuff like that. Those are things he does administratively. (C4)

In terms of the off field stuff, my assistant is very involved in the gala dinner, he runs a bunch of our sports camps, he has a great relationship with our alumni. He was a basketball player and football player and they are all very aware of who he is. He sits on everything from our athletic banquet to our major award committees. (C6)

Assistant Coach - Coaching Athletes Directly. Whereas the last property accounted for what the roles and responsibilities head assistant coaches had on their football teams, the current property discussed how assistant coaches were successful in those roles. Specifically, this property described the personal relationships assistant coaches had with athletes, and their knowledge and leadership skills used to coach athletes.

As a result of their roles, assistant coaches were able to have closer relationships with the athletes:

My assistant is definitely closer to the players than I am and that is the way that we want it. You set the guidelines as the head coach but he is there to monitor them on the day to day operations. So he is kind of like a foreman in a shop. You can tell

him how you want him to do things but he basically runs it. (C4)

Head and assistant coaches have different relationships with the players. Most of the players are comfortable going to the assistant coaches because they deal with them more hands on then they do with the head coach. Usually when it comes to the head coach it is a big problem. However, for day to day issues, a lot of them will deal with their position coach which I think is good (C2)

Due to their close relationships with athletes, assistant coaches had a large influence on their development. Therefore, the participants felt it was important for their assistant to have a strong knowledge base and the skills to disseminate their knowledge:

It is critical for an assistant to not only have the knowledge but to have the ability to transfer knowledge to the athletes. You have to be able to teach and communicate your ideas well. You have great knowledge of what you are doing. You have to know the package that you are teaching and the reasons you are teaching it. You are going to get asked that because it is not just do it because I said so anymore. If a player asks why we are doing something, well you better know. So teaching is critical, absolutely critical. (C3)

In addition, head coaches noted it was important that their assistants complimented their knowledge and leadership in order to provide a different perspective and coaching style for the athletes:

You need to have an assistant who compliments you and that is probably the most important thing. If all you are looking for is a mirror image of yourself then your team's coaching staff will never be any better than you are. I don't want my capacity for excellence to be a limitation to our program. I want to surround myself with people who are better than me. You know who continue to raise the bar and force me to become a better coach. (C5)

You have to have some good cops and bad cops. My assistant can play more of a bad cop role than I do. I think it's important that the second in command be different than the head coach in a variety of perspectives. (C1)

**Support Staff - Influence on Team.** It is important to note that in order to have a successful football program the head coach needed to have more than just a great head assistant coach. In addition, they were required to work collectively with their support staff to accomplish their team goals:

The interesting thing is that in Canadian Intercollegiate Sport it is the volunteers who make the program. That guy out there who can contribute ten or twelve hours a week and is still doing an important job. You can't afford to hire the best guy, but a lot these guys are dedicated guys. They may not know all that you need them to know and they may not have the time to go find the answers either. However, because they are good people and because they have good relationships with kids, they really make the difference. They may have been teachers, or good managers, or good leaders. (C5)

My defensive coordinator is the same as my head assistant coach, he cares about the kids, he works hard, and he demands that the kids do the things in an appropriate manner both on and off the field. Finally, he cares about their education. (C2)

The other thing besides being family men that I think is pretty cool is that a lot of our staff are educators. They are teachers, gentlemen who have chosen a career working with young people and who enjoy engaging students. Those are two things that I think are consistent. I will give you a game day program with all of our coaches' bios. You will see that most of them have been here for more than ten years and I think there are seven of our fifteen on staff here that are teachers. I think those are two very common themes. (C6)

# **Development of Assistant Coaches and Athletes**

The current higher order category was the smallest and included 199 meaning units representing 30% of the data. The previous category exemplified the main roles and responsibilities head assistant coaches had in the selection and development of their athletes. This category discussed the methods head coaches used to develop their head assistant coaches. Moreover, it described the relationships the participants had with their head assistant coaches and support staff as they worked together to develop their student athletes.

Career Development of Assistant Coach. The position of head assistant coach requires strong leadership skills and a wealth of football knowledge. This property examined the external sources and leadership skills our participants used to prepare their assistant coaches for their roles and responsibilities.

The participants wanted their head assistants to be exposed to a variety of knowledge.

Therefore, they sent them to other university or professional football camps as often as possible:

In the development of my assistant coach I think it is important that he sees other perspectives. He knows what I believe in because we have been together for so long. Therefore, I think it's really important that he sees other ways of doing things and is exposed to different concepts, different programs, and different coaches. That way he can improve our team by incorporating the things he likes from each team. (C1)

To develop my assistant I try to expose him to new ways of doing things. For example, we went to a university in the States where they were renowned for running good practices, dynamic practices. They run upbeat practices in a very different way. In a two hour practice you lose a lot of time. If you spend twenty minutes conditioning then your practice is pretty short. In this example, my assistant was able to find ways of including conditioning within our drills and that is the kind of stuff that will make you better. (C4)

Another source head coaches used to expand their assistants' knowledge was coaching conferences:

In order to develop my assistant I like to send him to different coaching conventions. He went to the American Football Coaches Association convention this year. They have a huge convention where they invite six to eight coaches who have had the most success this past year in bowl games. He would have listened to clinics given by them. I addition, I send him every year to the East-West bowl game where he will meet all of the head coaches from coast to coast. At this event there are a number of presentations being made by NFL and CFL coaches. I make sure that he goes to these types of events. (C1)

Finally, the participants supported their assistants' participation in the National Coach Certification Program. For example one coach stated: "I think coach certification is part of developing coaches and I think that you should try to get all your coaches certified. (C3)".

In addition to acquiring external sources of knowledge, the participants spoke about the leadership skills and behaviours they used to develop their head assistant coaches.

Specifically, they provided their assistants with guidelines and offered feedback on their performance:

I expect my coaches to motivate not criticize or belittle. I teach them to coach people not football. Teach them to be organized. I have them master the basics and skills required to teach players what they have to teach. I expect them teach hard work, integrity, values, and morals. These are some of the guidelines I set for my coaches. (C2)

I develop my assistant by working together with him and critiquing the film. Asking him what he did, and why he ran a certain play. I offer suggestions regarding other plays to get his opinion on them. That is the kind of dialogue I like to have with him. Giving him feedback and trying to understand why he made his choices is important. Then I will critique and tell him what I liked, what I thought could have been better, and I offer different alternatives. (C3)

Head coaches described that the development of their assistant coaches was a continuous process. They described increasing the number and difficulty of their assistants' responsibilities as their skills increased:

To develop your assistant you need to give him an ascending order of increased responsibilities. You need to ask him to do more, but you don't sort of dump it all on his desk at once. Little by little you give him projects in a structured environment where he can prove himself to you and you can prove things to him. (C5)

Progression and keeping my assistant engaged is important for his development. To give him a static job would bore him to death and I would lose him. So we keep expanding his roles and getting him to do more and more until ultimately I can step aside and become his special team's coordinator some day. (C6)

Although the participants monitored their assistants work, they discussed how it was important to provide them with the autonomy to lead and make the important decisions regarding their football unit:

When developing my assistant I let him do his thing. I provide guidance and he knows that he can come in here at anytime and discuss anything. It is a very open relationship. I think that the main thing is to be here for him and let him go and let him grow. You need to let him learn and make mistakes while helping him along the way. (C3)

I provide my assistant with autonomy to foster his development. This allows him the opportunities to develop his leadership. If you never give him the opportunity to take control then it won't happen and he will become dependent on you. He won't develop any leadership competency. However, if you put them in a leadership position you are now developing their skills in that area. (C5)

**Head Coaches' Relationships.** When developing and working with their assistant coaches the participants discussed how it was important to have a positive working environment. This property discussed the personal and work relationships head coaches had with their coaching staff and athletes.

All coaches the importance of getting along with their head assistant coach and having a positive work environment:

Finding an assistant with whom you can function with is important. Coaches come in all shapes and sizes. It would be nice if you can become friends and your personalities can complement one another. However, I would say the most important thing is that you can maintain an effective working relationship. (C5)

It is important for me to be friends with my assistants. I am very relationship oriented, and I would have a hard time working with someone I didn't get along with. I am very close with my head assistant coach. We socialize often outside of football and I am close with his family. When I was an assistant coach, it was exactly the same with my head coach. I really think that that's important. (C2)

I think combining work and family is important. The only way to make family and football work is if their time is integrated. Therefore that friendship between my assistant and I is important. Having relationships with his wife and his kids and my kids is the only way that it is going to get it all done. (C6)

Similarly, coaches spoke about creating a positive work environment that extended to all members of their coaching staff:

It is important to me to come in to a work environment every day where you can smile and have a joke with your staff. Where you can sit down and chit chat for a few minutes to see how they are doing. Life is important and some people think forming these bonds are a waste of time because you are not on task. I feel otherwise. Creating a positive environment is important to me. It is important to come in every day and enjoy your work. When it gets to the point where it is not longer enjoyable it behooves you to do something about it. (C5)

**Athlete Development.** The collective goal of university football staffs is to develop their student-athletes and prepare them to excel in football and in life. This property discussed how coaches improved their athletes' skills on and off of the field.

The participants noted that a football team's success on the field happens with their senior players. Therefore, coaches noted the importance of progress and pushed their athletes to continually improve their skills:

I value progression and I always say you win with seniors. I will use an example of weights. You may come here and you bench two hundred pounds. Then your second year you are at two twenty five. Finally in your third year you reach two fifty. It is all about progress. If you show me you can do something then you can't come back down anymore. If you have done it once this needs to be your new standard until you reach a new personal best. We have a progress chart on all their attributes. It doesn't matter whether you are the slowest player, the strongest player, or the weakest player as long as you are working and making progress we are happy. (C4)

While developing their athletes, head coaches cautioned against using the same approach to developing athletes. They described that coaches needed to consider their athletes development individually and that it was important for them to develop all members of their team regardless of their status:

You are always dealing with different young men in different ways. They all come from different backgrounds so a cookie cutter approach doesn't work. They are individuals. At some point they have to go out and be united on the field as a team, but certainly you would be mistaken to develop them all under the same approach. Off the field they are individuals and have individual needs and wants. I believe you need to address it in that way. (C2)

You have to make everyone feel important. Whether they are the all star or a guy who is not playing at all, if they feel important then they are going to give back. If they know that you care. Not just care that they score a touchdown on Saturday or whatever. If they know that you just care about them in general as a person. How their doing in school, how things are at home, or whatever it may be. (C3)

In addition to developing their athletes' football skills, the participants spoke about using football as a tool to develop their life skills:

Pursuit of excellence inside and outside of the classroom is important to me. I had twelve athletes who were recognized for their scholastic excellence last year. I will make sure that we have at least twelve if not more in a Vanier cup year to really signify that academics and athletics complement each other. They are not in conflict with each other. We are doing better on the field because we have bright kids. Their success on the field is actually correlated with their success in the classroom. (C6)

I make a commitment to my players' families. A commitment that their son will come out of here a better football player obviously, but I want him to come out a better citizen. It is important to me that he comes out with great values and an education. You know courtesy, politeness, punctuality, team work, I could go on. (C4)

Although my vision for players involves success on the field, it also involves success off the field. The one thing that is extremely important is to let everyone know our priorities. When we are talking to recruits and their parents we tell them that the number one thing we want from your son is for him to graduate. So education is parallel. I tell them that my goal is for them to graduate and then come back at homecoming as a successful person in whatever field they have chosen. Then, along with their education and personal success they will also have a successful football career where they will compete for and win championships. (C3)

We know at the end of the day that very few of our athletes are going to play pro football. Therefore, as a coach, it is up to us to teach the core values required for success in academics and in life. If we can instill those values then they have the tools to be successful in all of their life experiences. First off, I want them to have a great experience here and I want them to get their degree. Second, I want them to leave here with a good set of core values. If we accomplish the core values and the education then pro football is a bonus. (C2)

### Summary

The purpose of this study was to provide an in depth description of how Canadian university football head coaches selected, developed, and utilized their head assistant coach. Six football coaches were purposely selected based on their coaching success on and off the field. Coaches were individually interviewed and an inductive analysis of the data revealed three higher order categories: selection of the head assistant coach, coaching staff duties, and development of assistant coaches and athletes.

According to the head coaches; the evolution of their coaching knowledge began with lessons they learned from their coaches and teammates while they were still athletes.

Following their athletic careers, head coaches extended their knowledge through formal education by completing university degrees and acquiring various levels of coaching certification. Upon graduation, the participants were hired as assistant coaches and were

mentored by their head coach. The participants described this mentorship as the most important learning experience in his career. After successful careers as assistant coaches, the participants were hired as head coaches and were required to build their own coaching philosophies and select their own assistants. All participants felt their assistants needed to fit within their vision and share similar values and beliefs. The coaches described the personal characteristics, football experiences, and traits they looked for when selecting their assistants. Head coaches emphasized the importance of hiring good human beings with strong values, which often included caring about the athletes and being loyal to the football program. Finally, head coaches looked for assistants who possessed a strong base of football experience, which included lessons learned from their careers as players and coaches.

The head coaches noted that their assistants had a significant impact on the success of their team. The participants outlined the most important roles and responsibilities of head assistant coaches and how the coaching staff collectively worked together. Of these roles and responsibilities, recruiting was described as the most crucial element to a successful football program. Recruiting involved two skills: identifying top prospects and the ability to sell the program and connect with athletes. Four coaches described how their assistant coaches' social skills were instrumental in recruiting top level athletes, including how their assistants spent many hours meeting with athletes and their families selling their school and football program.

In addition to recruiting future student athletes, the head assistant coaches also served as coordinators of a major team unit (e.g., offense, defense, or special teams) and were required to organize and interact with the coaching staff during practices and games to ensure their unit practiced and performed successfully. Coaches noted that a large part of this

process involved their assistants interacting directly with their athletes. Assistant coaches were said to have closer relationships with athletes, where they interacted more frequently and provided more encouragement and daily feedback. Finally, assistant coaches were required to fulfill many administrative duties to ensure the success of the program (e.g., fund raising, planning, and organizing football camps).

Head coaches felt it was important to develop their assistants' coaching knowledge and leadership skills in order to prepare them for their roles and responsibilities. The coaches described how they used external sources to develop their assistant's knowledge base, including sending them to university or professional football training camps, coaching conferences, and funding their coaching certifications.

# Chapter 5

### **Discussion**

The purpose of this study was to provide an in depth description of the knowledge, cognitive processes, and leadership behaviours Canadian University head football coaches used to select and develop their most senior assistant coach. Specifically, this study identified the important characteristics head coaches looked for when hiring their head assistant coach, the main roles and responsibilities they assigned their assistants, and the techniques and behaviours they used to develop them. Three higher order categories emerged from this study: selection of the head assistant coach, coaching staff duties, and development of assistant coaches and athletes. Each of these categories will be discussed with respect to related literature.

### **Selection of the Head Assistant Coach**

This higher order category included the participants' evolution into coaching and how they acquired their coaching knowledge. In addition, it included head coaches' vision and philosophies concerning coaching student athletes. Finally, coaches selected their assistants according to their vision and discussed the personality characteristics and experiences they looked for when selecting their head assistant coaches. Although the coaches were in different stages of their careers, there were many commonalities in their responses.

The current study provides information on the experiences and career development of coaches in the context of Canadian University football. It appears that Canadian football coaches followed similar career paths to elite head coaches in other sports (e.g., Bell, 1997; Erickson, Côté, & Fraser-Thomas, 2007; Gilbert, Côté, Mallett, 2006; Gilbert, Litchkten, Gilbert, Zelezny, & Côté, 2009; Schinke, Bloom, & Salmela, 1995). In particular, the

participants of the current study had career paths that were similar to the seven stages of coach development suggested by Schinke and colleagues. For example, the participants all began playing football during their youth and reached elite levels in their athletic careers which ranged from playing in the CIS to playing professionally. The participants differed from the coaches in Schinke and colleagues study in that none of the coaches reached the *International Elite* Stage in their athletic careers. However, several coaches competed professionally in the Canadian Football League which is the highest level of professional football in Canada. Similar to the coaches in Schinke and colleagues' study, the participants felt their experiences as elite athletes helped shape their coaching philosophies and their interactions with their athletes. Specifically, they described their athletic careers as the first step of the career evolution because of the valuable lessons learned from their coaches and teammates.

Other research has shown that athletic participation benefits coaches' career progression but is not necessary for their success (Carter & Bloom 2009; Gilbert et al. 2006; Gilbert et al., 2009). For example, Gilbert and colleagues (2006) found that successful coaches averaged 13 seasons in their sport and were above average athletes. Likewise, Gilbert and colleagues (2009) found youth sport coaches with longer athletic careers achieved more success coaching (e.g., playoff appearances and championships). On the other hand, Carter and Bloom found that University coaches noted that were able to have successful University coaching careers without having been elite athletes. In the current study, all of the coaches had long athletic careers, were above average athletes, and believed the lessons learned as athletes had a significant effect on their coaching careers. Therefore, although elite athletic careers are not necessary for success as a head coach at the University

level, these results suggest that long successful athletic careers have a positive impact on coaches' careers.

Subsequent to their athletic careers, the participants continued to follow the career development pathways outlined by Schinke and colleagues (1995). However, the majority of participants skipped the Novice Coaching stage and entered straight into the Developmental Coaching stage. Whereas the Novice Coaching stage involves coaching at a recreational level, the Developmental Coaching involves coaching competitive teams and requires a higher degree of knowledge. To acquire knowledge and increase their coaching and teaching abilities, the participants pursued university degrees. Specifically, five coaches possessed undergraduate degrees: one held a bachelor's degree in political science, one an education degree, and three a physical education degree. In addition, three coaches also held a master's degree: one in finance, one in business administration, and one in sport management. The participants described learning valuable teaching and organizational skills while completing their degrees and noted that having a university degree strengthened their resume and chances of obtaining a coaching position. Similarly, Carter and Bloom (2009) found that expert coaches recommended studying kinesiology or physical education at a university to increase their coaching abilities. These results suggest that acquiring a University degree may be a preferred method of formal learning that University football coaches use to increase their knowledge and further their careers.

In addition to acquiring University degrees, all of the coaches increased their coaching knowledge by attaining varying levels of coach certification in Canada's national coach education program. Some research has indicated that coaches who participated in coach education programs felt more confident in their knowledge and ability to coach

(Malete & Feltz, 2000), and held positive views regarding the program's content and teaching methods (Cassidy, Potrac, & McKenzie, 2006; Hammond & Perry, 2007). On the other hand, others have criticized formal coach education programs (Cushion, Armour, & Jones, 2003; Jones & Wallace, 2005). For example, Cushion and colleagues believed that formal coach education was inherently flawed because coaches' learning became decontextualized and formal programs failed to teach coaches to comprehend and adapt to the continuously changing contexts involved in coaching. The coaches in the present study had mixed feelings about Canada's coach education program. They felt that coach education courses were useful at the beginning of their coaching careers. However, after gaining experience coaching, the participants stopped attending courses and began encouraging their younger protégés to become certified. These results suggest that formal coach education programs may be useful for elite football coaches during the early stages of their careers but experience-based learning may provide them with more valuable knowledge as they progress in the later stages of their careers.

Similar to the elite coaches interviewed by Schinke and colleagues (1995), the participants' acquisition of knowledge extended beyond formal education and involved working as assistant coaches under the mentorship of master coaches. For example, coaches gained experience recruiting, running practices, and calling plays during games, as assistant coaches. Gould, Giannini, Krane, and Hodge (1990) found that experience and observation of other coaches represented the primary source of coaching knowledge. Similarly, before acquiring a head coaching position, the participants noted that the majority of their coaching knowledge and experience was acquired from their work as assistant coaches. However, the participants did not simply learn to coach through exposure to new coaching situations.

Instead, they were exposed to new situations under the careful guidance of their head coach who served as their mentor. As such, the coaches in the current study discussed the importance of mentorships and some described them as their most significant learning experience. Under the guidance of their mentors, the coaches learned new tactics, technical skills, styles of leadership, and coaching philosophies that would provide them with the knowledge and skills necessary to succeed in elite coaching. These results coincide with previous research that has shown that head coaches influenced their assistant's coaching philosophies and behaviours through careful guidance (Bloom, Durand-Bush, Schinke, & Salmela, 1998; Gould et al., 1990; Jones, Harris, & Miles, 2009). For example, Bloom and colleagues noted that coaches' strategies and philosophies were impacted by the knowledge received from mentorships while working as assistant coaches. The current study extends mentoring literature by explaining how important their mentorships were on their coaching careers. The lessons learned from mentorships as assistant coaches affected their strategies, philosophies, and provided them with the experience needed for their current jobs. According to the current participants mentorships may be a valuable tool for young coaches to acquire the appropriate experience and skills needed to become a University football coach.

Following their experience as assistant coaches, the participants of the current study were hired as University head football coaches and entered the fifth stage of development in Schinke and colleagues' (1995) framework. Coaches at this stage are recognized for their success by their peers for leading successful University teams to championships and producing national or professional caliber players. The participants did not enter the sixth and final stage *International Elite Coaching*. The coaching emphasis at the *International Elite Coaching* stage shifts to an outcome centered orientation, whereas at the *Elite National* 

Coaching level coaches use a process focused approach. It is possible that the coaches did not enter this stage because of the limited number of positions available to coach football at the international stage. It is also possible that coaches preferred coaching at the national stage because it coincided with their values and beliefs. The coaches in the current study were aware of how difficult it is for Canadians to play football professionally and cared more about developing athletes holistically. Specifically, coaches cited football as a tool for developing the skills necessary for athletes to succeed in academics and in life, and that developing their athletes' football skill came second to this task. In sum, the career paths of the participants resembled those of other elite coaches but had several variations in their progression and final position (Carter & Bloom, 2009; Schinke et al., 1995). This shows that there are common events and experiences in the career progression of successful head University coaches in Canada. However, it is not necessary for coaches to share all of the same experiences. In addition, this study suggests that elite coaches are not always motivated to coach professional or international athletes.

Once hired as head coaches, the participants were required to deliver their own vision and coaching philosophies to their staff and athletes. However, they did not simply imitate the visions of their mentors. The participants relied on their experiences and lessons learned as athletes and as assistant coaches to form their vision. The participants described the importance sharing their vision with their assistant coach, coaching staff, and athletes. In transformational leadership, a leader's vision is an important tool used to inspire and motivate followers towards shared organizational goals (Bass & Riggio, 2006). In the present study the coaches' vision provided a source of motivation and a sense of unity to the organization as a whole. Research in sport has examined coaches' abilities to create and sell

their vision to athletes (Charbonneau, Barling, & Kelloway, 2001; Vallée & Bloom, 2005; Yukelson, 1997). For example, Vallée and Bloom found Canadian University head coaches achieved success by gaining commitment and enthusiasm from their athletes by having them buy into their vision. Similarly, Yukelson found coaches' visions influenced everything from team selection, seasonal planning, practices, and goal setting. Similarly, in the current study, coaches' visions also affected the selection and development of their athletes. However, whereas past research has focused on coaches' abilities to create and sell their visions to athletes, the current study adds to the literature by providing one of the first accounts of the relationship between coaches' vision and their coaching staff. Specifically, the coaches described selecting assistant coaches who shared their coaching philosophies and emphasized that in order for athletes to buy into their vision all of the coaching staff had to be sending the same message.

To ensure that their head assistants shared the same philosophies and could operate within their vision, the participants evaluated their personalities and the qualities they possessed when deciding who they would hire. Similar results were found by Schinke and colleagues (1995), where head coaches noted that early in their careers they were selected as assistant coaches based on their personal compatibility with their head coach and their coaching potential. The current results by provide a detailed discussion of the specific personality traits and life experiences head coaches looked for when hiring their head assistant coach.

The participants' first priority was finding an assistant who was caring, possessed a strong set of values, and had the leadership skills necessary to do what was right for their athletes. These results coincide with literature that examined the personality characteristics of

youth (Trudel & Gilbert, 2006) and university coaches (e.g., Carter & Bloom, 2009; Vallée & Bloom, 2005). For example, Vallée and Bloom found that successful University coaches cared about their athletes and had a legitimate interest in their lives. In addition, Trudel and Gilbert described that the main motivation of youth coaches was the work with kids and help with their development. Whereas previous research examined head coaches who currently held a coaching position, the current study extends these findings by examining the personalities and values required before acquiring a University coaching position. This study demonstrated that being caring and possessing strong values were pre requisites for head assistant coaching positions. Interestingly, one study showed that head coaches looked for similar characteristics in their athlete leaders (Bucci, Bloom, Loughead, & Caron, 2012). For example, when selecting athlete leaders, coaches looked for players who set an example by being guenuine, honest, and caring, and who held a sincere concern for their teammates well being. Similarly, coaches in the current study discussed how their assistants set a positive example and always did what was best for the team. Taken together, research indicates that in University sport, caring about the general wellfare of others is important for all levels of leadership trancending down from head coaches to athlete leaders.

Another personality characteristic the participants required in their head assistant coach was loyalty. Coaches cited loyalty as being particularly important because of the competitive nature of coaching in the CIS. Furthermore, the participants noted their loyalty to their assistants was equally as important. The 3 + 1 Cs model postulates that one of the major elements to a successful coach - athlete relationship is *commitment* (Jowett & Lavallee, 2007). This involves mutual thoughts of attachment to one another and intentions of maintaining their relationship. The results of the current study suggest that the same mutually

committed relationship exists between head coaches and their assistants. In business, workers loyalty to their supervisors and their organizations has been shown to positively affect their performance (Chen, Tsui, & Farh, 2002; Lee, Carswell, & Allen, 2000). Similarly, the participants discussed how it was important for their assistants to be loyal to themselves and the football program as a whole. Meilke (2007) examined loyalty in sport and found that assistant coaches who stayed with the same program for years while demonstrating loyalty and competence were more likely to be promoted to head coaching positions. The current findings suggest that the loyalty assistant coaches demonstrated as players or as position coaches had a significant impact on their progression to the position of head assistant coach.

In addition to personality traits, head coaches also valued their assistants' experiences in football as players and as assistant coaches. Research has shown that coaches' general career progressions begins as athletes and were followed by a progression through the ranks as an assistant coaches as they earned promotions and gained new responsibilities (Erickson, Côté, & Fraser-Thomas, 2007; Gilbert et al., 2006; Gilbert et al., 2009; Schinke et al., 1995). The coaches in this study provided an explanation for this transition. They noted their assistants' athletic experiences provided them with a valuable base of football knowledge and an understanding of what players were experiencing that they looked for in an assistant coach. In addition, one coach described how his assistant coach's behaviors as a player offered insight on the type of coach he would be. Likewise, Schinke and colleagues found coaches believed they earned their first job as an assistant coach because of their tenacity and character as players. The current study confirms this belief by affirming the influence of coaches' knowledge gained and behaviours demonstrated as elite athletes on their progression into coaching.

Contrary to this belief, Carter and Bloom (2009) demonstrated that it was possible to become University coaches without having been elite athletes. However, the coaches described having to work extra hard to gain an understanding of how their players were feeling and had to learn the football knowledge they lacked from not being elite athletes. One way of acquiring this knowledge was through experience at various coaching positions in high schools and Universities. Interestingly, only two coaches in the present study spoke about the importance of previous coaching experience in their head assistant coach. When asked about the experiences they looked for when hiring their head assistant coaches, the majority of the participants focused on the importance of their assistants' athletic careers. These results suggest that both athletic and coaching experiences are important sources of knowledge, however head coaches may value athletic experience most when hiring a head assistant. However, these results may have been a result of other factors. For example, the coaches offered two explanations for placing more emphasis on their head assistant coaches' athletic careers. First, the participants discussed wanting a young head assistant coaches because they would have more free time and would be able to relate better with the athletes. According to the Self Determination Theory, feelings of relatedness are important for the overall development, motivation, and well being of athletes (Hollembeak & Amorose, 2005; Ryan & Deci, 2000). It is possible that because the participants valued having young assistant coaches, they would not have had the time to accumulate a wealth of coaching experience. Another coach offered a second explanation and described how his program did not have the funding to hire an assistant with a decorated coaching career. Therefore, it is possible that as a result of the cost of coaches with significant coaching experience, head coaches are forced to look for coaches who have gained the similar experiences during their athletic careers

(Davies, Bloom, & Salmela, 2005). These results are the first to provide a detailed description of the personalities and life experiences University head coaches looked for when hiring their head assistant coach.

# **Coaching Staff Duties**

This higher order category described the main roles and responsibilities of assistant coaches which included recruiting, managing a specific unit of the team, and interacting with athletes. Furthermore, this category discussed the support staff and the influence they had on their football teams.

Coaches in the current study felt team success began with recruiting talented athletes. Similarly, Langelett (2003) found that Division I American football teams who recruited successfully had better winning percentages the following five years than teams with less successful recruiting classes. Langelett acquired data from two expert recruiting analysts who create a list each year that ranks University teams' recruiting classes. Recruiting class rankings are created by averaging the rating of high school athletes that have committed to a University program. Next, each year recruiting class rankings were compared with team performance in the following seasons. Results demonstrated that following a high ranked recruiting class year, teams continuously experienced better performance than those of lesser rankings for the following five years. Similarly, recruiting success has been studied outside of sport (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005; Terpstra & Rozell, 1993). For example, Terpstra and Rozell sampled over 200 companies and found those who employed more recruiting techniques (employee referrals, IQ tests) to evaluate candidates had greater organizational performances (e.g., sales, profits). No research has examined the relationship between recruiting and performance in Canadian University sport. However,

some of the current head coaches described recruiting as the single most important task in CIS football, thus calling for future research to examine the relationship between recruiting and team success in Canadian University sport programs.

The participants noted that recruiting involved forming strong personal relationships with recruits and their families, as well as identifying top athletes. Klenosky, Templin, and Troutman (2001) found that player-coach relationships were one of the greatest influences on school choice of Division I American athletes. Positive relationships with coaching staffs were associated with athletes' feelings of comfort and enjoyment and beliefs about their athletic development. The 3 + 1 Cs model describes closeness as a key element in the coachathlete relationship (Jowett, 2003; Jowett & Lavallee, 2007). Research has shown that closeness between athletes and coaches positively affected training and performance (Jowett, 2003; Philipe & Seiler, 2006). On the other hand, Jowett noted there could be negative consequences if athletes and coaches became too close to each other. The participants in the current study described how they wanted their assistant coaches to be closer to their athletes than the head coach. This study suggests that assistant coaches may be particularly important in satisfying athletes' feelings of closeness. In order to establish close meaningful relationships with recruits, head coaches noted that their assistants needed to have strong social skills. Studies in businesses have demonstrated that impressions of recruiters influenced job applicant's decision making (Chapman et al., 2005; Rynes, Bretz, & Gerhart, 1991). For example, Rynes and colleagues found that University students chose their future job using information gathered from their impressions of their recruiters. In the current study, assistant coaches were required to approach potential athletes, sell their program, and establish meaningful relationships through numerous interactions with recruits and their

parents. These results suggest that in University sport recruiters also need strong social skills to connect with and convey important impressions on recruits. Interestingly, not all participants had head assistants who were great at forming bonds with top athletes. In these cases, the head coach or other members of the coaching staff would often meet with recruits. All of the coaches felt their head assistant needed to be proficient recruiters. However, participants who had a head assistant that was not a strong social recruiter described them as excellent at indentifying talented prospects. These results suggest that recruiting is a dynamic process and that it may be essential for head assistant coaches to be skilled at either indentifying talent or forming lasting bonds with recruits. Furthermore, it confirms the importance of developing close relationships between coaches and athletes, and demonstrates that this relationship begins during the recruiting process.

Besides their roles in recruiting future athletes, the participants provided their head assistants with full responsibility for a major team unit (e.g., offense, defense, or special teams). As such, assistant coaches were required to organize and prepare their athletes for games with well run practices. According to the Coaching Model (Côté, Salmela, Trudel, Baria, & Russell, 1995), organization, training, and competition are the primary components of coaching. The assistant coaches of the current study had large roles in all three of the major components of the coaching model. Organization involves providing athletes with optimal environments for their development through a variety of tasks including creating a vision, planning practices and training session, and working with a support staff. Training incorporates the knowledge coaches use to help athletes learn and perform various skills during practice. Competition is the culmination of organization and training and involves coaches' tasks before, during, and after competitions. Whereas, past research has examined

head coaches roles in the coaching process, the current study examined head coaches' perceptions of the roles of their head assistant coach, a previously understudied area of coaching science.

Past studies have shown that assistant coaches played a supportive role in planning and coordinating practices and training sessions, and providing strategic advice to head coaches (Carter & Bloom, 2009; Côté & Salmela, 1996; Lemyre, Trudel & Durand-Bush, 2007; Vallée & Bloom, 2005). For example, Côté and Salmela noted that head coaches delegated responsibilities to their assistant coaches according to their strengths and weaknesses and worked together with their coaching staff to plan practices. Carter and Bloom found that head coaches consulted with their assistants on matters in which their assistants had knowledge or expertise that they were lacking. Similarly, Lemyre and colleagues showed that head coaches not only consulted their assistant coaches for advice but worked together when developing strategies and solving coaching problems. In accordance with past research, head assistant coaches of the current study spent significant time planning and coordinating practices. However, the assistants did more than just support their head coaches and were given full authority by their head coaches over all coaching responsibilities of a major team unit. This involved creating strategies, coordinating the support staff during practices, training athletes, and having full responsibility of calling plays during games. Compared to most sports where roster sizes rarely reach 30, football teams can have upwards of 100 players and requires approximately a dozen coaches. In addition, there are numerous team units that often operate independently from one another. As such, the size and specialization of positions on football teams may make it too difficult for head coaches to control all aspects of the coaching process. These results indicate that assistant football

coaches may have a larger leadership role and may have more responsibilities than in other team sports.

Although assistant coaches' main tasks involved preparing athletes to succeed during competition, they also held important administrative duties off the field. Desjardins (1996) identified administrative concerns as one of coaches' seven organizational tasks. Similarly, Davies, Bloom and Salmela (2005) found that head University coaches spent a significant portion of their time dealing with administrative duties. In the current study assistant coaches were responsible for creating and maintaining relationships with alumni, fund raising, organizing football camps, and handling daily team needs. This study confirms the importance of administrative duties in University sport programs and extends previous findings by noting that the administrative tasks of University coaches also extended to assistant coaches.

As a result of the central role assistant coaches held in athletes' training, it was important for them to possess sound teaching and communication skills. This is not the first study to discuss the importance of the coach as an effective teacher (e.g., Bloom & Salmela, 2000; Carter & Bloom, 2009; Davies et al., 2005; Tharp & Gallimore, 1976; Wooden, 1988) and communicator (Carter & Bloom, 2009; Cushion, Armour, & Jones, 2006; Jones, 1997). For example, Tharp and Gallimore studied the legendary coach John Wooden and found that approximately half his coaching behaviours involved providing his athletes with instruction, which ranged from teaching complex skills to showing athletes how to properly put on a pair of socks. Similarly, Carter and Bloom found teaching was so important that in some instances coaches spent more time refining their teaching skills than their sport specific knowledge. Furthermore, they cited that communication was one of the main priorities in

coaching. Therefore, it appears that similar skills and behaviours are required for assistant coaches at the University level. Like head coaches, assistant coaches needed to be strong teachers and communicators in order to prepare athletes for competition.

In addition to being skilled pedagogues, the participants felt it was important for their head assistant coach to possess sport specific knowledge and leadership skills. Furthermore, they wanted their head assistant to provide athletes with a perspective and coaching style that differed from their own. According to the Multidimensional Model of Leadership, coaching success depends on the level of congruence between athletes' preferred coaching behaviours and the actual behaviours coaches demonstrate (Chelladurai, 1978). The current head coaches noted that their assistants balanced their knowledge (e.g., offense vs. defense) and leadership style (e.g., good cop vs. bad cop). Research has shown that athletes were more satisfied (Chelladurai, 1993; Sherman, Fuller, & Speed, 2000), and performed at a higher level (Chelladurai, 1984; Horne & Carron, 1985) when coaches demonstrated athletes preferred level of training and instruction and social support. The current assistant head coaches were more involved with their athletes on a daily basis providing more feedback, reinforcement, and encouragement (Solomon et al., 1996). This suggests that one of the roles of assistant coaches may be to help balance coaching demands. Specifically, assistant coaches may serve to satisfy athletes' preferences for training, instruction, feedback, and social support.

### **Development of Assistant Coaches and Athletes**

This category discussed the leadership skills and methods head coaches used to develop their head assistant coaches. In addition, coaches discussed how they worked

together with their head assistant coaches and support staff while developing their student athletes.

Head coaches prepared their assistants for their important roles and responsibilities with their football teams. One example was exposing them to outside sources of knowledge, such as the Canadian Coach Certification Program, other University or professional football camps, and coaching conferences. Research has shown that coaches learned valuable knowledge through formal coach education programs (Cassidy et al., 2006; Hammond & Perry, 2007), observation of other coaches (Bloom, Durand-Bush, Schinke, & Salmela, 1998; Jones, Armour & Potrac, 2003), and attending coaching clinics (Carter & Bloom, 2009; Trudel & Gilbert, 2006). For example, Hammond and Perry found that coaches had favourable perceptions of the course content and teaching styles used in coach accreditation courses. In addition, Carter and Bloom found that coaches purposefully attended coaching conferences and other teams' practices and games to acquire coaching knowledge. Whereas past literature simply described the sources of coach learning, the current results extend these findings by describing the active role head coaches played in the learning process of their protégés. Specifically, they directed them to the best learning environments and covered their costs as a way to enhance their knowledge and skills, which positively affected the success of the program and the career path of their assistant coaches.

In addition to acquiring external sources of knowledge, the participants alluded to the leadership skills and behaviours they used to develop their head assistant coaches. The coaches of the current study developed their assistants using behaviours that resembled the 4 I's of transformational leadership: inspirational motivation, idealized influence, intellectual motivation and individual consideration (Bass, 1985; Bass & Riggio, 2006). Inspirational

motivation involved setting a collective goal of developing student-athletes that excelled in football and in life. Furthermore, the coaches established guidelines for their assistants and offered feedback on their performance to ensure that they would accomplish their goals. Intellectual stimulation occurred when head coaches challenged their assistant's knowledge by sending them to different football camps and conferences as often as possible. Individual consideration was demonstrated when the head coaches fostered personal growth in their assistants by providing them with increasingly difficult coaching challenges in an autonomy supportive environment. Finally, behaviours that resembled idealized influence indirectly discussed by the coaches. Idealized influence involves developing trust, respect, and admiration by setting a good example of the behaviors and values that were part of their vision. The participants held themselves, as well as their coaching staff to a high standard of conduct in order to set a positive example for their athletes.

Research examining transformational leadership has shown that transformational leaders increased follower's commitment, involvement, loyalty, and performance (Bass, 1999; Bycio, Hacket, & Allen, 1995). For example, Bycio and colleagues found nurses who were guided by transformational leaders were more satisfied with their leaders, had more confidence in their leaders, were more loyal to their hospital, and exerted more effort at work. In addition, other research has shown that transformational leadership could be learned (Barling, Weber, & Kelloway, 1996; Kelloway & Barling, 2000). For example, Barling, and colleagues taught bank managers how to be transformational leaders and compared their followers' productivity with untrained managers. Compared to untrained managers, trained bank managers successfully increased outcome variables such as sales in their respective branches. Assistant coaches are in a unique position because they are followers to head

coaches while concurrently acting as leaders to athletes. As a result, the current head coaches spent significant time training their assistants and sending them to camps and conferences in order to develop their personal leadership skills. These results suggest that because of the dual role assistant coaches have, transformational leadership behaviours might especially important when developing assistant coaches. Inherently, it may allow head coaches to develop their head assistant coaches' leadership skills so that they can in turn develop leadership throughout their successive ranks, such as their support staff and athlete leaders.

A small group of researchers have used transformational leadership theories to evaluated coaches' interactions with their athletes (e.g., Charbonneau, Barling, & Kelloway, 2001; Rowold, 2006; Vallée & Bloom, 2005). For example, Rowold compared nearly 200 martial arts students' perceptions of their coaches' leadership behaviours with the athlete's beliefs about their coaches' effectiveness and their own behaviours. They found that athletes who perceived their coaches as transformational leaders rated their coaches as more effective, exerted more effort, and were more satisfied with their coach compared to athletes under a different style of leadership. In addition, Charbonneau and colleagues found that transformational leadership improved athlete performance by increasing their level of intrinsic motivation. In another study, Vallée and Bloom examined some of Canada's most successful coaches including how they built their programs. Their results showed that coaches' leadership behaviours were similar to the 4 I's of transformational leadership, which suggested that it also impacts the winning percentage of coaches who use this style of leadership.

Similar to findings reported by Vallée and Bloom (2005), the 4 I's of transformational leadership were also exhibited by the successful coaches in our study with respect to

developing athletes. First, the coaching staff worked collectively to create and reinforce their team goals and vision. Second, they set an example how to behave on and off the field.

Third, coaches pushed their athletes to continually improve their skills. Finally, coaches developed their athletes individually and made it a priority to develop all members of their team regardless of their status. In addition to evaluating head coaches behaviours, the current study is the first to our knowledge to examine head coaches' perceptions of their coaches' behaviours when developing athletes. The results demonstrated that similar to business organizations, transformational leadership behaviours transcended through the organizational ranks of the current coaching staff (Bass, Waldman, Avolio, & Bebb, 1987). These results extend transformational leadership literature by demonstrating that transformation leadership behaviours are not exclusively used by head coaches and are found at each level of coaching staff. Having transformational assistant coaches may induce better performance and leadership from athletes.

The participants discussed the value of developing close interpersonal relationships with their staffs. While research has examined how head coaches shared their coaching philosophies and knowledge with their assistant coaches (Bloom et al., 1998; Côté, Salmela, 1996; Jones, Harris, & Miles, 2009), the emotional relationship that exists amongst the coaching staff has yet to be empirically examined. The 3 +1 Cs model has been used to evaluate the emotional aspect of the coach-athlete relationship (Jowett, 2003; Jowett & Lavallee, 2007; Philipe & Seiler, 2006). Jowett and Lavallee suggested that a successful working relationship between coach and athlete was interdependent, which required closeness (e.g., feelings of trust, respect, and liking), commitment (e.g., attachment and intention to maintain athletic relationship), and complementarity (cooperation and reciprocal

behaviours). In the current study, coaches described how they worked in collaboration with their entire coaching staff towards the common goal of developing athletes. The coaches described having a positive atmosphere where they could joke with their coaching staff and have fun while working hard at reaching their goals. Although coaches said they did not have to be close friends with their assistants, many socialized with them outside of sport and established close personal relationships with their assistants and their families. These results, suggest that similar to with athletes, coaches interpersonal relationships with other coaches may be important to team success. Furthermore, this study demonstrated that the 3 +1 Cs model may be useful for evaluating the relationships amongst the coaching staff as they work together developing their athletes.

Although, the coaching staff developed their athletes' sport specific skills, members of our study said that graduating athletes was their number one priority. Furthermore, football was discussed as a tool for developing athletes in all aspects of life. These findings are in congruence with past research that has shown that head University coaches prioritized the holistic development of their athletes (Bloom & Salmela, 2000; Carter & Bloom, 2009; Côté, Salmela, Trudel, Baria, & Russell, 1995; Vallée and Bloom, 2005; Wooden, 1988). Likewise,For example, Vallée and Bloom found that coaches were genuinely invested in the personal development of their athletes and taught them appropriate. Similarly, John Wooden became very close with his athletes and worked with them through all of their life problems to ensure that they reached their maximum potential. The current coaches helped athletes achieve their scholastic goals and acquire various life skills from football. In particular, the coaches spent a significant amount of time creating a vision that encompassed academic success, selecting and developing a staff that bought into their vision, and developing

athletes' core values such as courtesy, politeness, punctuality, and team work that allowed them to succeed in school, on the field, at work, and in their communities. These results reinforce the notion that a winning at all costs philosophy is not necessary for team success. Finally, because very few Canadian football players can make a living playing their sport, it may be particularly important for football coaches to have an education focused philosophy.

# Chapter 6

### **Summary**

Coaching science research has increased significantly in the past four decades.

However, the majority of research has focused on the knowledge and behaviours of head coaches. To date few studies have examined the characteristics and roles of assistant coaches. The purpose of this study was to provide an in depth description of head assistant coaches from the perspective of the head coach. Specifically, this study examined the personal characteristics, career development, and main roles and responsibilities of assistant coaches from the perspective of the head coach.

Six male head University football coaches participated in the current study. The coaches were purposely selected based on four criteria. First, they were a current head coach of a CIS football team. Second, they have been a head coach for a minimum of 5 years. Third, they had a career winning percentage over .500. Finally, they were recommended as an effective head coach by a panel of experts for their accomplishments on and off the football field. All coaches were interviewed individually for a period of 60 to 90 minutes at various locations across eastern Canada. All interviews took place at mutually agreed upon locations and times of the participants' choosing.

This study collected data using a semi-structured open-ended interview that followed an interview guide created by the primary researcher and members of the research team.

Prior to the interview, rapport was established with the participants, and each head coach was required to complete a demographic questionnaire and a consent form. Three higher order categories emerged from the data that described head coaches' personal development, views of their head assistant coach, and the relationships they had with their coaching staff and

athletes. These categories were called selection of the head assistant coach, coaching staff duties, and development of assistant coaches and athletes. Selection of the head assistant coach discussed head coaches' evolution into coaching, how they formed their coaching philosophies, and the personal characteristics and experiences they looked for when selecting their head assistant coaches. Coaching staff duties included the main roles and responsibilities of head assistant coaches. Furthermore, this category discussed the influence the support staff had on football teams. Development of assistant coaches and athletes involved the methods head coaches used to develop their head assistant coaches knowledge and leadership skills. Moreover, it described the relationships head coaches had with their coaching staff while they collectively developed their student athletes.

Although head coaches had different coaching backgrounds, many commonalities in their personal development, thoughts, and behaviours concerning their head assistant coach emerged. Specifically, the participants had a shared understanding of what personal characteristics and career progression they wanted their head assistants to posses.

Furthermore, the participants used similar techniques and leadership skills when developing their head assistant coaches. Finally, all coaches had positive personal and work relationships with each member of their coaching staff. The findings of the current study supported empirical coaching science and leadership research. Specifically, assistant coaches followed parallel career paths to head coaches and required similar knowledge, skills, and behaviours. However, assistant coaches were not mirror images of head coaches and had their own specific roles and responsibilities on their football teams. This study provided the first comprehensive description of the assistant coach position.

### **Conclusions**

# **Head Coaches' Career Development**

- The majority of coaches played football from a young age and reached elite levels of competition, which ranged from the CIS to playing professionally.
- Coaches' philosophies and coaching styles were shaped in part by interactions with influential coaches and teammates during their athletic careers.
- Five coaches possessed undergraduate degrees, four from education, while three also obtained a master's degree.
- Valuable teaching and organizational skills were acquired while completing their
   University degrees. They also felt their university degree strengthened their resume
   and chances of obtaining a coaching position.
- Coaches had conflicting views on the National Coach Certification Program.
   Specifically, while most felt they were useful during the early stages of their careers.
- Working as an assistant coach was a valuable source of knowledge acquisition.
- Mentorships from head coaches had a significant impact on participants' career development. Three coaches described them as the most influential learning experiences of their careers.
- Once hired as head coaches, the participants created their own vision and coaching philosophies using lessons learned through past experiences.

# **Selecting the Head Assistant Coach**

- Assistant coaches were selected in part because they had strong values and cared about their athletes.
- Head and assistant coaches were loyal to each other and the football program.

- Young assistant coaches were valuable because they had more free time to dedicate to football and could relate with athletes.
- The budget in Canadian University football does not always allow for hiring an assistant with a decorated coaching career.

# Head Assistant Coaches' Roles and Responsibilities

- Recruiting is important to the success of Canadian University football teams. Some coaches described recruiting as the single most important task in CIS football.
- Every member of the coaching staff is involved in recruiting.
- Recruiting involved identifying top athletes and forming personal bonds with athletes and their families.
- Recruiters must possess strong social skills in order to connect and sell their football program to recruits and their families.
- Head assistants had full responsibility for a major team unit (e.g., offense, defense, or special teams).
- Head assistants spent significant time planning and working with their support staff to coordinate practices.
- For competition, head assistant coaches were in charge of creating game plans,
   calling plays, and providing feedback to their athletes and support staff.
- Head assistant coaches had important administrative duties such as: creating and maintaining relationships with alumni, fund raising, organizing football camps, and handling team needs.
- Assistant coaches must be skilled teachers and communicators to disseminate their knowledge to athletes.

# **Head Assistant Coaches' Development**

- Coaches developed their assistants over a slow process that involved increasing the number and difficulty of assistants' responsibilities as their skills increased while providing ongoing feedback.
- Assistant coaches were provided with autonomy to lead and make important decisions regarding their football unit.

# **Practical Implications**

The current study has begun the process of addressing assistant coaching which remains an under researched area in coaching science. The results provide a comprehensive understanding of head coaches' characteristics, career paths, values, and behaviours, and how they affected the selection and development of their head assistant coach. The present study is of interest to all members of University sport programs, including athletic directors, head coaches, head assistant coaches, support staffs, and athletes.

These results are useful for head coaches in charge of building a University sport program. This study presented the philosophies of coaches who continuously produced athletes that excelled in football, school, and in their communities. These results demonstrated that a winning at all cost approach was not necessary to team success in University sport. The coaches were aware that few Canadians play professional football and used football as a tool to develop athletes' skills in and outside of sport. Future coaches adopting these philosophies may produce student athletes that can continue to succeed beyond their athletic careers.

In addition, this study described the important characteristics head coaches looked for when hiring their assistant coach. This may provide head coaches with new information on

how to identify their assistant coaches. By hiring assistant coaches who have strong values and that care about athletes' education, head coaches may be better able to accomplish their team goals and ensure that their athletes all graduate. Assistant coaches may also use this information to understand the prerequisites required to being hired as an assistant coach on a University coaching staff.

In addition to providing information on how head coaches selected their assistants, the current results described how they prepared them for their coaching duties. Specifically, head coaches developed their assistants' football knowledge and coaching skills by providing them with external learning sources (e.g., professional and University football camps, coaching conferences, coach certification), and internal coaching experiences (e.g., calling plays, running a practice), until they were able to take full responsibility over coaching a major team unit. This information may allow other head coaches to develop more autonomous head assistant coaches, which could provide them with freedom to focus on other important elements of coaching such as recruiting, administrative duties, and developing other members of their coaching staff and athletes.

Additionally, the current study described the main responsibilities and duties of assistant coaches, which included recruiting, managing a specific unit of the team, administrative duties, and interacting with athletes. These results are one of the first accounts of the roles and responsibilities of assistant coaches. Therefore, these results may benefit assistant coaches who are considering a position at the University level. Assistant coaches may use this information to decide whether a career as a University assistant coach is right for them. In addition, head coaches might use this information to delegate responsibilities

amongst their coaching staff. Having clear responsibilities assigned to their assistants may result a more efficient coaching staff that could provide better leadership for student athletes.

This study is the first to document the importance of recruiting in Canadian University sport. These results showed that head coaches invested a significant amount of time identifying the recruiting skills of their coaching staff and assigning them recruiting duties. Furthermore coaches described that recruiting was paramount to the success of their football programs. The results may be useful for athletic directors who will see the value of allocating more money to teams for recruiting. This may include assigning funds specifically for reimbursing coaches costs (e.g., hotel, car, gas, food) during recruiting expeditions. In addition, athletic directors could increase coaches' salaries and include specific recruiting duties in their job requirements.

Finally, these results may help researchers better understand the career paths, relationships, responsibilities, personal characteristics, and experiences of University assistant coaches. This study is the first step in understanding the assistant coaching position and provides precedence for a new area of research in coaching science. The potential implications on future research will be discussed below.

#### **Limitations and Recommendations**

The purpose of the current study was to describe why head coaches selected their head assistant coaches, how they developed them after their selection, and what were the head assistant coaches main roles were on the team. While this study investigated head coaches' perspectives on the selection, development, and main roles and responsibilities of their head assistant coaches, limitations existed. It would be interesting to repeat this study in the future from the perspective of the assistant coaches. Assistant coaches may have different

interpretations than head coaches, or could possibly provide more detail on certain subjects that were discussed by the coaches of the current study. Similarly, future researchers could examine the views of athletes or the support staff on the roles and responsibilities of assistant coaches. Examining the prospective of other members of the coaching staff and team would certainly provide a more global understanding of assistant coaches.

As a result of the small sample size (N=6) and purposeful selection of the participants, these results may only be generalized to successful coaches in Canadian University football programs. Other studies may want to investigate professional head football coaches, or coaches in other countries such as the United States where there is more money, media focus, and attention attached to their athletic programs. Furthermore, this study examined some of the most highly decorated elite coaches in the country. Therefore, coaches of lesser caliber and experience could be examined, including youth, recreational, or high school coaches. In addition, research can examine assistant coaches of other sports. For instance, assistant coaches of different team and individual sports may have unique requirements, development paths, or roles because of the nature of their sport. The current study could also be replicated using various genders combinations of head coaches, assistant coaches, and athletes. For example, a male assistant coach may interact differently with female athletes than a female assistant coach would with male athletes. However, these studies would have to be conducted with other sports since an examination of gender differences would not be possible in football. Finally, although this study provided important information on recruiting in context of Canadian University sport, this was not the purpose of the study. Other studies are required on the recruiting strategies and roles of all members of the coaching staff.

### References

- Atwater, L. E., Cambreco, J. F., Dionne, S. D., Avolio, B. J., & Lau, A. N. (1997). Effects of rewards and punishment on leader effectiveness, leader charisma and follower reactions. *Leadership Quarterly*, 2, 133–152. doi: 10.1016/S1048-9843(97)90013-8
- Avolio, B. J., & Gibbons, T. C. (1988). Developing transformational leaders: A lifespan approach. In J. A. Conger & R.N. Kanungo (Eds.), *Charismatic leadership: The elusive factor in organizational effectiveness*, (pp. 276–308). San Francisco, CA: Jossey–Bass.
- Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81, 827–832. doi: 10.1037/0021-9010.81.6.827.
- Bass, B. M. (1985). Leadership and performance beyond expectation. NewYork: Free Press.
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, *8*, 9–32. doi: 10.1080/135943299398410.
- Bass, B. M., & Riggio, R.E. (2006). *Transformational leadership* (2<sup>nd</sup> edition). Mahwah, NJ: Lawrence Erlbaum.
- Bass, B. M., Waldman, D. A., Avolio, B. J., & Bebb, M. (1987). Transactional leadership and the falling dominoes effect. *Group and Oranganization Studies*, *12*, 73–87. doi: 10.1177/105960118701200106.
- Beam, J. W., Serwatka, T. S., & Wilson, W. J. (2004). Preferred leadership of NCAA division I and II intercollegiate student-athletes. *Journal of Sport Behavior*, 27, 3–17.

- Bell, M. (1997). The development of expertise. *The Journal of Physical Education,*\*Recreation & Drama, 68, 34–38.
- Biddle, S. J. H., Markland, D., Gilbourne, D., Chatzisarantis, N. L. D., & Sparkes, A. C. (2001). Research in sport and exercise psychology: Quantitative and qualitative issues. *Journal of Sports Sciences*, *19*, 777–809. doi: 10.1080/026404101317015438.
- Bloom, G., A. (1997). *Characteristics, knowledge, and strategies of expert team sport* coaches (Unpublished doctoral dissertation). University of Ottawa, Ottawa, Canada.
- Bloom, G., A. (2002). Coaching demands and responsibilities of expert coaches. In J. M. Silva & D. E. Stevens (Eds.), *Psychological foundations of sport*, (pp. 438–465). Boston: Allyn and Bacon.
- Bloom, G., A. (2011). Coaching psychology. In P. R. E. Crocker (Ed.), *Sport and exercise psychology: A Canadian perspective*, (pp. 278-305). Toronto: Pearson.
- Bloom, G., A., Durand-Bush, N., Schinke, R., J., & Salmela, J. H. (1998). The importance of mentoring in the development of coaches and athletes. *International Journal of Sport Psychology*, 29, 267–281.
- Bloom, G. A., Stevens, D. E., & Wickwire, T. L. (2003). Expert coaches' perceptions of team building. *Journal of Applied Sports Psychology*, *15*, 129–143. doi: 10.1080/10413200305397.
- Bolkiah, S., & Terry, P. C. (2001). Coaching preferences of athletes in Brunei Darussalam and Great Britain: A cross-cultural test of the path-goal theory. In A. Papaioannou, M. Goudas, & Y. Theodorakis (Eds.), *Proceedings of the International Society of Sport Psychology 10<sup>th</sup> World Congress* (pp. 8–10). Thessaloniki, Greece: Christodoulidi Publications.

- Brophy, J. A., (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology*, 75, 631–661. doi:10.1037/0022-0663.75.5.631.
- Bucci, J., Bloom, G. A., Loughead, T. M., & Caron, J. G. (2012). Ice hockey coaches' perceptions of athlete leadership. *Journal of Applied Sport Psychology*, *24*, 243–259. doi: 10.1080/10413200.2011.636416.
- Burns, J. M. (1978) Leadership. New York: Harper and Row.
- Bycio, P., Hackett, R. D., & Allen, J. S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, 80, 468–478. doi: 10.1037/0021-9010.80.4.468.
- Cassidy, T., Potrac, P., & McKenzie, A. (2006). Evaluating and reflecting upon coach education initiative: The code of Rugby. *The Sport Psychologist*, *20*, 145–161.
- Carter, A. D., & Bloom, G.A. (2009). Coaching knowledge and success: Going beyond athletic experiences. *Journal of Sport Behavior*, *32*, 419–437
- Chapman, D. S., Ugegrslev, K. L. Carroll, S. A., Piasentin, K. A., & Jones, D. A. (2005).
  Applicant attraction to organization and job choice: A meta-analytic review of the correlate of recruitin outcomes. *Journal of Applied Psychology*, 90, 928–944. doi: 10.1037/0021-9010.90.5.928.
- Charbonneau, D., Barling, J., & Kelloway, E. K. (2001). Transformational leadership and sports performance: The mediating role of intrinsic motivation. *Journal of Applied Social Psychology*, *31*, 1521–1534. doi: 10.1111/j.1559-1816.2001.tb02686.x.
- Chelladurai, P. (1978). *A contingency model of leadership in athletics* (Unpublished doctoral dissertation). University of Waterloo, Waterloo, Canada.

- Chelladurai, P. (1984). Discrepancy between preferences and perceptions of leadership behavior and satisfaction of athletes in varying sports. *Journal of Sport Psychology*, 6, 27–41.
- Chelladurai, P. (1990). Leadership in sports: A review. *International Journal of Sport Psychology*, 21, 328–354.
- Chelladurai, P. (1993). Leadership. In R. N. Singer, M. Murphey, & L. K. Tennant (Eds.), *Handbook of research on sport psychology* (pp. 647–671). New York: Macmillan.
- Chelladurai, P. (2007). Leadership in sports. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (3rd ed.) (pp. 117–135). New Jersey: John Willey.
- Chelladurai, P., & Carron, A. V. (1981). Task characteristics and individual differences, and their relationship to preferred leadership in sport. In G. C. Roberts & D.M. Landers (Eds.), *Psychology of motor behavior and sport–1982* (pp. 87). Champaign, IL: Human Kinetics.
- Chelladurai, P., Imamura, H., Yamaguchi, Y., Oimnuma, Y., & Miyauchi, T. (1988). Sport leadership in a cross-national setting: the case of Japanese and Canadian university athletes. *Journal of Sport and Exercise Psychology*, *10*, 374–389.
- Chelladurai, P., & Saleh, S. D. (1980). Dimensions of leader behavior in sport: Development of a leadership scale. *Journal of Sport Psychology*, *2*, 32–45.
- Chen, Z. X., Tsui, A. S., & Farh, J. (2002). Loyalty to supervisor vs. organizational commitment: relationships to employee performance in China. *Journal of Occupational and Organizational Psychology*, 75, 339–356. doi: 10.1348/096317902320369749.

- Côté, J. (2006). The development of coaching knowledge. *International Journal of Sports*Science and Coaching, 1, 217–222. doi: 10.1260/174795406778604609
- Côté, J., Bruner, M. W., Strachan, L., Erickson, K. & Fraser-Thomas, J. (2010). Athlete development and coaching. In J. Lyle and C. Cushion (Eds.), *Sport coaching: Professionalism and practice* (pp.3-17). Oxford: Elsevier.
- Côté, J., & Gilbert, W. (2009). An integrative definition of coaching effectiveness and expertise. *International Journal of Sports Science and Coaching, 4,* 307–323. doi: 10.1260/174795409789623892.
- Côté, J., & Salmela, J. H. (1996). The organizational tasks of high-performance gymnastic coaches. *The Sport Psychologist*, *10*, 247–260.
- Côté, J., Salmela, J. H., Baria, A., & Russell, S. J. (1993). Organizing and interpreting unstructured qualitative data. *The Sport Psychologist*, 7, 127–137.
- Côté, J., Salmela, J. H., & Russell, S. J. (1995). The knowledge of high-performance gymnastic coaches: Methodological framework. *The Sport Psychologist*, *9*, 65–75.
- Côté, J., Salmela, J., H., Trudel, P., Baria, A., & Russell, S., J. (1995). The knowledge of high-performance gymnastic coaches: Competition and training considerations. *The Sport Psychologist*, 9, 76–95.
- Côté, J., Young, B., North, J., & Duffy, P. (2007). Towards a definition of excellence in sport coaching. *International Journal of Coaching Science*, *1*, 3–17.
- Cregan, K., Bloom, G.A., & Reid, G. (2007). Career evolution and knowledge of elite coaches of swimmers with a physical disability. *Research Quarterly for Exercise and Sport*, 78, 339–350.

- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Cushion, C. J., Armour, K. M., & Jones, R. L. (2003). Coach education and continuing professional development: Experience and learning to coach. *Quest*, *55*, 215–230. doi: 10.1080/00336297.2003.10491800.
- Davies, M. J., Bloom, G. A., Salmela, J. H. (2005). Job satisfaction of accomplishes male university basketball coaches: The Canadian context. *International Journal of Sport Psychology*, *36*, 172–192.
- Denzin, N. K., & Lincoln, Y. S. (2005). *The Sage handbook of qualitative research* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Desjardin, G. (1996). The Mission. In J. H. Salmela (Ed.), *Great job coach! Getting the edge from proven winners* (pp. 67–99). Ottawa Canada: Potentium.
- DiMarco, A. M., Ohlson, C. J., Reece, S. D., & Solomon, G. B. (1998). Expectations and coaching experience: Is more better? *Journal of Sport Behavior*, *21*, 444–455.
- Elenkov, D. S. (2002). Effects of leadership in research on organizational performance in Russian companies. *Journal of Business Research*, *55*, 467–480. doi: 10.1016/S0148-2963(00)00174-0.
- Erle, F. J. (1981). *Leadership in competitive and recreational sport* (Unpublished master's thesis). University of Western Ontario, London, Canada.
- Erickson, K., Côté, J., & Fraser-Thomas, J. (2007). Sport experiences, milestones, and education activities associated with high performance coaches. *The Sport Psychologist*, *21*, 302–316.
- Fontana, A., & Frey, J. H. (1994). Interviewing: The art of science. In N. K. Denzin (Ed.), Handbook of qualitative research (pp. 361–376). Thousand Oaks, CA: Sage.

- Gilbert, W. D., Côté, J., & Mallett, C. (2006). Developmental paths and activities of successful sport coaches. *International Journal of Sports Science & Coaching*, 1,69–76. doi: 10.1260/174795406776338526.
- Gilbert, W. D., Lichkten, L., Gilbert, J. N., Zelenzy, L., & Côté, J. (2009). Developmental profiles of successful high school coaches. *International Journal of Sports Science & Coaching*, *3*, 415–431. doi: 10.1260/174795409789623928.
- Gilbert, W. D., & Trudel, P. (2004a). Analysis of coaching science research published from 1970–2001. *Research Quarterly for Exercise and Sport*, 75, 388–399.
- Gilbert, W. D., & Trudel, P. (2004b). Role of the coach: How model youth team sport coaches frame their roles. *The Sport Psychologist*. *18*, 21–43.
- Gould, D., Giannini, J., Krane, V., & Hodge, K. (1990). Educational needs of elite U.S. national team, Pan America, and Olympic coaches. *Journal of Teaching in Physical Education*, *9*, 332–344.
- Guest, G., Bunce, A, & Johnson, L (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*, 58–82. doi: 10.1177/1525822X05279903.
- Hammond, J., & Perry, J. (2007) A multi-dimensional assessment of soccer coaching course effectiveness. *Ergonomics*, 48, 1698–1710. doi: 10.1080/00140130500101213.
- Harris, M., & Rosenthal, R. (1985). Mediation of interpersonal expectancy effects: 31 metaanalyses. *Psychological Bulletin*, *97*, 363–386. doi: 10.1037/0033-2909.97.3.363
- Hollembeak, J., & Amorose, A. J. (2005). Perceived coaching behaviours and college athletes' intrinsic motivation: A test of self determination theory. *Journal of Applied Sport Psychology*, 17, 20–36. doi: 10.1080/10413200590907540.

- Hoption, C., Phelan, J., & Barling, J. (2007). Transformational leadership in sport. In M. R. Beauchamp, & M. A. Eys (Eds.), *Group dynamics in exercise and sport psychology*. (pp. 45–60). New York: Routledge.
- Horn, T. S. (1984). Expectancy effects in the interscholastic athletic setting: Methodological considerations. *Journal of Sport Psychology*, *6*, 60–76.
- Horn, T. S. (2002). Coaching effectiveness in the sport domain. In T. S. Horn (Ed.), Advances in sport psychology (pp. 309–354). Champaign, IL: Human Kinetics.
- Horne, T., & Carron, A. V. (1985). Compatibility in coach-athlete relationships. *Journal of Sport Psychology*, 7, 137–149.
- Howell, J., & Avolio, B. J. (1993). Transformational leaderhsip, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated businessunits performance. *Journal of Applied Psychology*, 78, 891–902. doi: 10.1037/0021-9010.78.6.891.
- Howell, J., & Hall-Merenda, K. (1999). The ties that bind: The impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology, 84,* 680–694. doi: 10.1037/0021-9010.84.5.680.
- Jones, R. L. (1997). 'Effective' instructional coaching behaviour: An analysis of the literature. *International Journal of Physical Education*, *24*, 27–32.
- Jones, R. L., Harris, & Miles, A. (2009). Mentoring in sports coaching: A review of the literature. *Physical Education and Sport Pedagogy*, 14, 267–284. doi: 10.1080/17408980801976569.

- Jones, R., & Wallace, M. (2005). Another bad day at the training ground: Coping with ambiguity in the coaching context. *Sport Education and Society, 10,* 119–134. doi: 10.1080/1357332052000308792.
- Jowett, S. (2003). When the "honeymoon" is over: A case study of a coach-athlete dyad in crisis. *The Sport Psychologist*, *17*, 444–460.
- Jowett, S., & Chaundry, V. (2004). An investigation into the impact of coach leadership and coach-athlete relationship on group cohesion. *Group Dynamic Theory and Practice*, 8, 302–311. doi: 10.1037/1089-2699.8.4.302.
- Jowett, S., & Clark-Carter, D. (2006). Perceptions of empathetic accuracy and assumed similarity in the coach-athlete relationship. *British Journal of Social Psychology, 45*, 617–637. doi: 10.1348/014466605X58609.
- Jowett, S., & Lavallee, D. (2007). Social psychology in sport. Windsor: Human Kinetics.
- Jowett, S., & Meek, G. A. (2000). The coach-athlete relationship in married couples: An exploratory content analysis. *The Sport Psychologist*, *14*, 157–175.
- Judge, T. A., & Piccolo, R. G. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755–768. doi: 10.1037/0021-9010.89.5.755.
- Kelloway, E. K., & Barling, J. (2000). What we have learned about developing transformational leaders. *Leadership & Organization Development Journal*, 21, 355–362. doi: 10.1108/01437730010377908.
- Kleinsasser, A. M. (2000). Researchers, reflexivity, and good data: Writing to unlearn. *Theory into Practice, 39,* 155–162. doi: 10.1207/s15430421tip3903\_6.

- Klenosky, D. B., Templin, T. J., & Troutman, J. A. (2001). Recruiting student athletes: A means-end investogation of school-choice decision making. *Journal of Sport Management*, 15, 95–106.
- Koh, W. L., Steers, R. M., & Terborg, J. R. (1995). The effects of transformational leadership on teacher attittudes and student performance in Singapore. *Journal of Organizational Behavior*, 16, 319–333. doi 10.1002/job.4030160404.
- Kuhnert, K. W., & Lewis, P. (1987). Transactional and transformation leadership: A constructive/developmental analysis. *Academy of Management Behavior*, 12, 648–657. doi: 10.2307/258070.
- Langelett, G. (2003). The relationship between recruiting and team performance in division 1 A college football. *Journal of Sports Economics*, *4*, 240–245. doi: 10.1177/1527002503253478.
- Lee, K., Carswell, J. J., & Allen, N. J. (2000). A meta-analytic review of occupation commitment: Relations with person and work–related variable. *Journal of Applied Psychology*, 85, 799–811. doi: 10.1037/0021-9010.85.5.799.
- Lemyre, F., Trudel, P., & Durand-Bush, N. (2007). How youth-sprt coaches learn to coach. *The Sport Psychologist*, 21, 191–209.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*, Beverly Hills, CA: Sage.
- Longshore, J.M. (1988). The associative relationship between transformational and transactional leadership styles and group productivity (Unpublished doctoral dissertation). Nova University, Boca Raton, United States of America.
- Malete, L., & Feltz, D., L. (2000). The effect of a coaching education program on coaching efficacy. *The Sport Psychologist, 14,* 410–417.

- Marshall, M. (1996). Sampling for qualitative research. *Family Practice*, *13*, 523–525. Doi: 10.1093/fampra/13.6.522.
- Mielke, D. (2007). Coaching experience, playing experience, and coaching tenure. *International Journal of Sports Science and Coaching, 2,* 105–108. doi:

  10.1260/174795407781394293.
- Myers, N. D., Vargas-Tonsing, T. M., & Feltz, D. L. (2005). Coaching efficacy in intercollegiate coaches: Sources, coaching behavior, and team variables. *Psychology* of Sport and Exercise, 6, 129–143. doi: 10.1016/j.psychsport.2003.10.007.
- Olympiou, A., Jowett, S., & Duda, J. L. (2008). The psychological interface between the coach-created motivational climate and the coach-athlete relationship in team sports. *The Sport Psychologist*, 22, 423–438.
- Patton, M. (1990). *Qualitative evaluation and research methods* (2<sup>nd</sup> ed.) Newbury Park, CA: Sage.
- Patton, M. (2002). Qualitative research and evaluation methods. Thousand Oaks, CA: Sage.
- Philippe, R. A., & Seiler, R. (2006). Closeness, co-orientation and complementarity in coachathlete relationships: What male swimmers say about their male coaches. *Psychology of Sport and Exercise*, 7, 159–171. doi: 10.1016/j.psychsport.2005.08.004.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and the effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, *1*, 107–142. doi: 10.1016/1048-9843(90)90009-7.

- Podsakoff, P. M., Todor, W., Grover, R., & Huber, V. (1984). Situational moderators of leader reward and punishment behaviors: Fact or fiction? *Organizational Behavior and Human Performance*, *34*, 21–63. doi: 10.1016/0030-5073(84)90036-9.
- Podsakoff, P. M., Todor, W., Skov, R. (1982). Effects of leader contingent and non contingent reward and punishment behaviors on subordinate performance and satisfaction. *Academy of Management Journal* 25, 810–821. doi: 10.2307/256100.
- Rangeon, S (2009). *Mapping the world of coaching science: A citation network* analysis (Unpublished master's thesis). California State University, Fresno, United States of America.
- Rejeski, W., Darracott, C., & Hutslar, S. (1979). Pygmalion in youth sport: a field study. *Journal of Sport Psychology, 1*, 311–319.
- Reynaud, C. (2005). She can coach. Champaign, IL: Human Kinetics.
- Riemer, H. A., & Chelladurai, P. (1995). Leadership and satisfaction in athletics. *Journal of Sport and Exercise Psychology*, 17, 276–293.
- Riemer, H. A., & Toon, K. (2001). Leadership and satisfaction in tennis: Examination of congruence, gender, and ability. *Research Quarterly for Exercise and Sport*, 72, 243–256.
- Rowold, J. (2006). Tranformational and transactional leadership in martial arts. *Journal of Applied Sport Psychology*, *18*, 312–325. doi: 10.1080/10413200600944082.
- Rubin, H. J., & Rubin, S. I. (1995). *Qualitative interviewing: The art of hearing data*.

  London: Sage.

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *5*, 68–78. doi: 10.1037/0003-066X.55.1.68.
- Rynes, S. R., Bretz, R. D., & Gehart, B. (1991). The importance of recruitment in job choice:

  A different way of looking. *Personnel Psychology*, 44, 487–521. doi: 10.1111/j.1744-6570.1991.tb02402.x.
- Schinke, R. J., Bloom, G. A., & Salmela, J. H. (1995). The career stages of elite Canadian basketball coaches. *Avante*, *1*, 48–62.
- Schliesman, E. S. (1987). Relationship between the congruence of preferred and actual leader behavior and subordinate satisfaction with leadership. *Journal of Sport Behavior*, *10*, 157–166.
- Sherman, C. A., Fuller, R., & Speed, H. D. (2000). Gender comparisons of preferred coaching behaviors in Australian sports. *Journal of Sport Behavior*, *23*, 389–406.
- Silverman, S., & Skonie, R. (1997). Research on teaching in physical education: An analysis of published research. *Journal of Teaching in Physical Education*, *16*, 300–311.
- Sinclair, D. A., & Vealey, R. S. (1989). Effects of coaches' expectations and feedback on the self- perceptions of athletes. *Journal of Sports Behavior*, *12*, 77–91.
- Smith, R., E., Smoll, F., L., & Curtis, B. (1979). Coach effectiveness training: A cognitive-behavioral approach to enhancing relationship skills in youth sport coaches. *Journal of Sport Psychology*, 1, 59–75.
- Solomon, G. B. (2001a). Performance and personality expectations of assistant coaches: Implications for athlete performance. *International Sports Journal*, *5*, 10–17.

- Solomon, G. B. (2001b). Performance and personality impression cues as predictors of athletic performance: An extension of expectancy theory. *International Journal of Sport, 32,* 88–100.
- Solomon, G. B. (2002). Sources of expectancy information among assistant coaches: The influence of performance and psychological cues. *Journal of Sport Behavior*, *25*, 279–286.
- Solomon, G. B. (2008). Expectations and perceptions as predictors of coaches' feedback in three competitive contexts. *Journal for the Study of Sports and Athletics in Education*, 2, 161–179.
- Solomon, G. B. (2010). The assessment of athletic ability at the junior college level. *International Journal of Sports Science and Coaching, 53,* 161–179. doi: 10.1260/1747-9541.5.1.37.
- Solomon, G. B., Striegel, D. A., Eliot, J. F., Heon, S. N., Mass, J. L., & Wayda, V. K. (1996).

  Self-fulfilling prophecy in college basketball coaches. *Journal of Applied Sport Psychology*, 8, 44–59. doi: 10.1080/10413209608406307.
- Sparks, A. C. (1998). Validity in qualitative inquiry and the problems of criteria: Implications for sport psychology. *The Sports Psychologist*, *12*, 363–386.
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.
- Strean, W. B. (1998). Possibilities for qualitative research in sport psychology. *The Sport Psychologist*, *12*, 333–354.

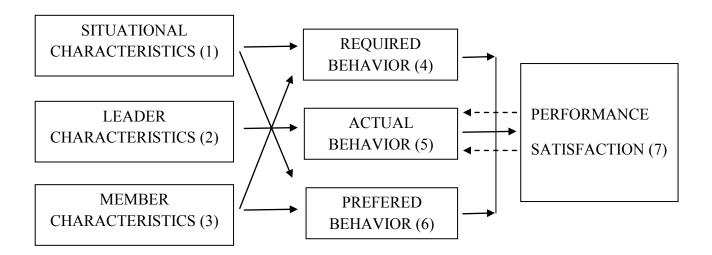
- Terpstra, D. E., & Rozell, E. J. (1993). The relationship of staffing practice to organizational level measures of performance. *Personnel Psychology, 46,* 27–48. doi: 10.1111/j.1744-6570.1993.tb00866.x.
- Terry, P. C. (1984). The coaching preferences of elite athletes competing at universiade.

  Canadian Journal of Applied Sports Sciences, 9, 201–208.
- Terry, P. C., & Howe, B. I. (1984). The coaching preferrences of athletes. *The Canadian Journal of Applied Sport Sciences*, *9*, 188–193.
- Tharp, R.G., & Gallimore, R. (1976). What a coach can teach a teacher. *Psychology Today*, 9, 75–78.
- Trudel, P., & Gilbert, W. D. (2006). Coaching and coach education. In D. Kirk, M.

  O'Sullivan, & D. McDonald (Eds.), *Handbook of research in physical education*(pp.516–539) London, UK: Sage.
- Vallée, C. N., & Bloom, G. A. (2005). Building a successful university program: Key and common elements of expert coaches. *Journal of Applied Sport Psychology*, 17, 179– 196. doi: 10.1080/10413200591010021.
- Waldman, D. A., Bass, B. M., & Yammarino, F. J. (1990). Adding to contingent-reward behavior. The augmentation effect of charismatic leadership. *Group and Organizational Studies*, *15*, 381–394. doi: 10.1037/0021-9010.80.4.468.
- Wilson, L. M, Bloom, G. A., & Harvey, W. J. (2010). Sources of knowledge acquisition: Perspectives of the high school teacher/coach. *Physical Education and Sport Pedagogy*, 15, 383–399. doi: 10.1080/17408980903273154.
- Wooden, J. (1988). They call me coach. Chicago, IL: Contemporary Books.
- Yardley, L. (2008). Demonstrating validity in qualitative psychology. In J. A. Smith (Ed.), *Qualitative psychology* (pp. 235–251). Thousand Oaks, CA: Sage.

- Yardley, L. (2000). Dilemmas in qualitative research. *Psychology and Health*, *15*,215–228. doi: 10.1080/08870440008400302.
- Yukelson, D. (1997). Principles of effective team building interventions in sport: A direct services approach at Penn State University. *Journal of Applied Sport Psychology*, *9*, 73–96. doi: 10.1080/10413209708415385.

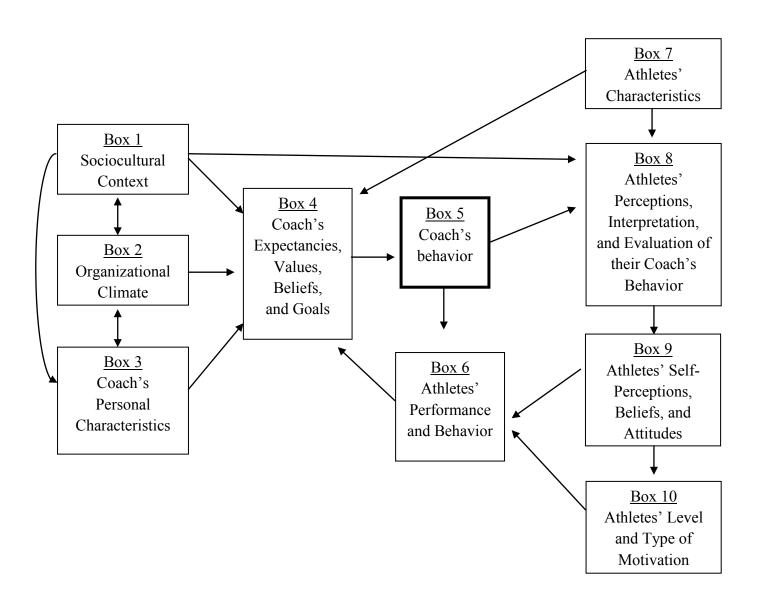
# Appendix A Multidimensional Model of Leadership (MML)



# Adapted from:

Chelladurai, P. (1978). *A contingency model of leadership in athletics* (Unpublished doctoral dissertation). University of Waterloo, Waterloo, Canada.

Appendix B
Working Model of Coaching Effectiveness



### Adapted from:

Horn, T. S. (2002). Coaching effectiveness in the sport domain. In T. S. Horn (Ed.), *Advances in sport psychology* (p. 309–354). Champaign, IL: Human Kinetics.

## Appendix C Recruitment Script

Dear		,

My name is Scott Rathwell and I am completing a Master's degree in sport psychology under the supervision of Dr. Gordon A. Bloom at the department of Kinesiology and Physical education of McGill University. We are inviting you to participate in our research study because you were identified as an eligible participant by a panel of past and current Canadian Interuniversity Sport coaches and athletic directors. This study looks to examine how successful university head football coaches select and develop their assistant coaching staff. If you decide to participate you will be asked questions regarding the selection and development of your current head assistant coach.

This study has been reviewed for its adherence to ethical guidelines by a McGill University Research Ethics Board. Any information you provide during this study will remain confidential. If you choose to participate, I will conduct a 1-2 hour interview with you in the location of your choosing. If more information is required, then a follow up telephone conversation will occur.

Should you have any questions concerning this study, please contact myself or my supervisor using the information provided at the bottom of the page. The McGill sport psychology laboratory has a history of producing influential research on coaching and leadership. If you would like to learn more about the research accomplished at the sport psychology lab, then please visit: <a href="http://sportpsychology.mcgill.ca/index.html">http://sportpsychology.mcgill.ca/index.html</a>.

Thank you, I look forward to hearing from you shortly.

Sincerely, Scott Rathwell

Scott Rathwell, BA Psychology MA Candidate in Sport Psychology McGill University E-mail: scott.rathwell@mail.mcgill.ca

Or

Dr. Gordon A. Bloom Associate Professor Department of Kinesiology and Physical Education McGill University (514) 398-4148, ext 0516; gordon.bloom@mcgill.ca

# Appendix D

# Demographic Questionnaire

1.	Name:						
2.	Age:						
3.	E-mail:						
4.	Address:						
5.	Phone Numbers (home, work, cell).						
6. What is your current coaching position?							
7. How long have you held your current coaching position?							
8.	8. What is your win loss percentage at your current position? (please circle)						
	500-600 601-700 701-800 801-900 901-999						
9.	What is your career win loss percentage as a head coach? (please circle) 501-600 601-700 701-800 801-900 901-999						
10. As an athlete, what sports have you have you participated in and what was the highest level of competition you reached in each sport?							
11. What is the highest level of education you have completed?							
12. What is the highest level of coaching certification you have completed (new and old stream)?							
13. How long have you been working with your current head assistant coach?							
14. Please list all of your experiences as an assistant coach (e.g., years coaching, teams)							
15. Please list all of your experiences as a head coach (e.g., years coaching, teams, individual, team championships, awards won).							

## Appendix E **Informed Consent Form**

This study is in partial fulfillment of the requirements for the degree of Master of Arts for Scott Rathwell, a graduate student, in sports psychology, in the Department of Kinesiology and Physical Education at McGill University. The purpose of this study is to explore how head university football coaches select and develop their assistant coaching staff. If you participate in this study you will be requested, without payment, to partake in a 90 minute interview where you will be asked to discuss why you selected your head assistant coach and how you developed him after your selection. If more information is necessary, then a followup telephone interview may occur. It is common practice that research interviews are audio recorded in order to produce a transcript of the session.

Once the interview is complete, you will obtain a typed transcript, which may be edited at your discretion. Prior to publishing, you will also receive copies of the results and conclusions of the study. The information you provide here will **remain confidential.** All data, audio recordings, and paper copies of questionnaires and consent forms will be securely stored in a password protected computer and locked cabinet for a period of 5 years. The data, audio recordings, and all paper copies will be destroyed 5 years after the study ends. The information disclosed during the interview will remain confidential and will be used for publication purposes and scholarly journals or for presentations at conferences. The researchers will not disclose names or identify the study participants at any time. This study has been reviewed by the McGill Research Ethics Board.

# Your participation in this study is voluntary and not mandatory. You are free to refuse to answer any questions or withdraw from participation at any time, for any reason, without penalty or prejudice.

After reading the above statement and having had the directions verbally explained, it is now possible for you to freely consent and voluntarily agree to participate in this research project based on the terms outlined in this consent form. You may refuse to continue participation at any time, without penalty, and all information gathered will remain confidential. Please contact the Research Ethics Officer at 514-398-6831 if you have any questions or concerns regarding your rights and welfare as a participant in this research study. Please sign below if

you agree to participate in this study.	
Signature	Date
I agree to the audio-taping of the interview be used solely for the purpose of transcrib	ws with the understanding that these recordings will bring these sessions. Yes No Initials
Scott Rathwell	Gordon Bloom, Ph.D.
Master's Candidate, Sport Psychology	Graduate Program in Sport Psychology
Dept. of Kinesiology & PE Dept. of Kinesiology & PE	
McGill University, Montreal, Quebec	McGill University, Montreal, Quebec
scott.rathwell@mail.mcgill.ca	gordon.bloom@mcgill.ca
	(514) 398-4184 ext. 0516

#### Appendix F **Interview Guide**

Pre-Interview Routine (Please refer to your assistant coach who has the most responsibility and is likely the highest paid when answering all questions)

Introduction Consent Form Demographic Questionnaire

#### **Opening Questions**

- 1. What coach has influenced you the most as an athlete?
  - Briefly describe this coach's leadership style.
- 2. Briefly describe your progression into coaching?
  - Assistant Coach
  - Head Coach
- Briefly describe the current state and potential of the team you are now coaching in comparison to other elite teams you have coached in the past?

#### **Key Questions:**

*Interviewer:* I would like you to answer the following questions with respect to *selecting* your head assistant coach.

- 4. What characteristics or key factors do you look for?

  - Past coaching experiences
  - Athletic experience
  - Knowledge: Technical, Tactical, Physical, Mental
  - Personality
  - Loyalty
  - Recruiting
- 5. How does your leadership style influence the selection of your head assistant coach?
  - -What are the similarities between your leadership styles?
  - -What are the differences between your leadership styles?

- 6. How does your vision of the team's potential influence the selection of your head assistant coach?
  - -Refer to question 3
  - Goals
  - Values
  - Beliefs
  - Expectancies

Interviewer: I would now like you to answer the following questions with respect to developing your head assistant coach.

- 7. Describe your relationship with your head assistant coach?
- How do you impact your head assistant coaches' development?
  - -What kind of behaviours to do use to foster his development?
- 9. How do you use him to help with your coaching demands?
  - -What responsibilities do you give him?
  - What role does he play during games?
  - Does the role of your assistant coach affect the team dynamics in any way?
  - Feedback: Frequency, Type, Athlete Status
- 10. How does your assistant coach affect the success of the team?

#### **Concluding Questions:**

- 11. Would you like to add anything else related to our interview?
- 12. Do you have any final comments or questions?

Appendix G Alphabetical Listing of the Frequency of Topics by Each Participant

Tags	<b>C</b> 1	<b>C2</b>	<b>C3</b>	<b>C4</b>	<b>C5</b>	<b>C6</b>	Total
AC - administrative duties	2	4	3	5	2	5	21
AC - age	1	1	1	0	0	2	5
AC - athlete relationships		6	4	7	4	4	29
AC - athletic experiences	1	2	5	0	1	4	13
AC - competition duties	2	2	2	1	2	2	11
AC - feedback - instruction	0	4	0	0	0	2	6
AC - feedback - motivation	14	5	0	0	0	0	19
AC - financial challenges	0	0	0	0	3	0	3
AC - loyalty	0	4	1	2	2	2	11
AC - personality - attitude	0	3	1	0	5	0	9
AC - personality - coaching style	2	0	2	0	4	3	11
AC - personality - communication	0	0	4	1	0	0	5
AC - personality - humour	2	0	0	0	0	0	2
AC - personality - knowledge	2	1	5	6	4	4	22
AC - personality - leadership	0	2	2	2	0	0	6
AC - personality - multiple characteristics	2	1	2	0	0	0	5
AC - personality - organization	0	0	1	0	3	0	4
AC - personality - values	0	3	3	2	0	3	11
AC - personality - work ethic	0	0	0	0	2	1	3
AC - practice duties	2	1	3	6	2	3	17
AC - previous coaching experiences	2	0	0	0	0	3	5
AC - recruiting - importance	7	0	1	0	4	6	18
AC - recruiting - social	1	0	2	2	0	4	9
AC - recruiting - talent identification	2	1	0	0	2	2	7
AC - vision	2	3	1	7	4	0	17
Athletes - character development	1	6	0	7	2	0	16
Athletes - feedback - individual	0	4	2	0	1	0	7
Athletes - football + whole person	2	3	2	3	0	4	14
Athletes - leadership	1	6	0	5	1	0	13
Athletes - skill development	2	1	0	1	5	0	9
Athletic experiences -> coaching success	2	1	5	1	2	2	13
Autonomy - AC	0	3	6	2	3	0	14
CFL camps - AC	4	0	0	2	0	2	8
Coaching certification - AC	1	0	1	0	1	0	3
Conferences - AC	1	0	0	1	0	2	4
Coaching influences - non coaches	0	2	0	0	0	1	3
Coaching influences - other coaches	3	2	2	4	11	4	26
Feedback differences with AC	3	0	2	3	0	0	8
Feedback to AC	0	0	3	0	2	1	6
Guidelines - AC	0	4	3	0	2	0	9
Increased responsibilities - AC	0	8	1	4	2	7	22
Literature - AC	0	2	0	1	0	0	3

Other university camps - AC	1	0	1	2	0	3	7
Personal athletic experiences		1	2	0	0	1	6
Personal coaching progression		1	2	5	10	3	23
Personal coaching progression - education		0	0	5	3	3	14
Personal leadership style		3	2	2	4	1	12
Personal relationships - AC		6	4	4	6	7	30
Personal relationships - athletes		1	1	4	5	3	15
Personal relationships - support staff	1	2	1	3	10	2	19
Recruiting - admissions	3	0	0	0	0	0	3
Recruiting - importance		2	1	0	0	1	5
Support staff - athlete relationships		0	2	1	2	0	6
Support staff - guest speakers		2	0	0	0	0	2
Support staff - knowledge		1	0	0	0	4	5
Support staff - personality		3	6	0	1	2	13
Support staff - recruiting		3	0	0	1	1	5
Support staff - tasks		1	0	0	0	0	5
Support staff - vision - shared		4	1	3	1	0	9
Team potential		3	3	5	7	3	28
Team vision		3	1	2	9	2	17
Total	98	121	97	111	135	109	671