ATHLETES' PERSPECTIVES OF GROUP DYNAMICS IN PROFESSIONAL GRIDIRON ${\bf FOOTBALL}$

By

Marc Glaude

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ABSTRACT

Abstract

In gridiron football, research suggests that assistant coaches are closer with the athletes and interact more often with them compared to the head coach (Rathwell et al., 2014; Sinotte et al., 2015). While these studies suggest that the assistant football coach has an important role in group dynamics, there remains a need to understand how the assistant coach develops team cohesion. In addition, exploring this topic within a particular positional group is essential because each group presents its own context. Specifically, studying cohesion on the offensive line is important because of group members' tendency to group together due to their unique skillset and continuous physical proximity (Martin et al., 2015). Extending this, while research has explored the various stressors related to high performance coaching (Mallett & Lara-Bercial, 2016), there remains a need to understand the athletes' viewpoint about the many unique elements of the professional sports context, such as the buying and selling of players (Elberse & Dye, 2012), and their influence on group dynamics. Thus, the purpose of this study was to explore professional athletes' perspectives of the group dynamics on the offensive line in gridiron football, including the role of the offensive line coach. Individual semi-structured interviews were conducted with six veteran professional offensive linemen whose average experience in the Canadian Football League was 7.3 years. Interviews were transcribed verbatim and organized into codes, themes, and overarching themes using a thematic analysis (Braun et al., 2016). Results from the analysis revealed that the players perceived several impediments to cohesion that were specific to the professional sports context, such as high roster turnover and players being perceived as commodities by management. Athletes also described assistant coaching factors that fostered cohesion, such as open-mindedness and adaptability, and coaching traits that impeded cohesion, such as negativity and inconsistent behaviours. Moreover, the players described how a good working relationship between the offensive line coach and the offensive coordinator was essential to achieve cohesion on the offensive line. Lastly, the participants described that they perceived the offensive line as their own entity within the larger team, and that strong veteran athlete leadership was essential for optimal group functioning. Overall, this is one of the first studies to include an elite sample of experienced professional gridiron football players who are discussing the uniqueness of group dynamics in professional sports. Thus, these results may help professional football organizations better understand group dynamics, which can influence personnel decisions, such as drafting and trading players or firing coaches. Lastly, the results of this study may be of interest to all members of professional sport organizations, including general managers, head coaches, assistant coaches, support staff members, and athletes to understand the role of the assistant coach in developing team cohesion and the ways by which their own behaviours positively and negatively influence team dynamics.

Résumé

La recherche dans le milieu du football nord-américain suggère que les entraîneurs adjoints sont plus proches de leurs athlètes et interagissent plus souvent avec eux comparativement à l'entraîneur-chef (Rathwell et al., 2014; Sinotte et al., 2015). Bien que ces études suggèrent que l'entraîneur adjoint joue un rôle important dans les dynamiques de groupe au football nordaméricain, il y a tout de même un besoin de comprendre comment l'entraîneur adjoint influence la cohésion d'équipe. De plus, l'exploration de ce sujet au sein d'un group en particulier est essentielle car chaque groupe présente un contexte unique. Plus précisément, explorer la cohésion au sein de la ligne offensive est important parce que les joueurs dans ce groupe ont tendance à se rassembler en vertu de leurs compétences uniques et de leur proximité physique (Martin et al., 2015). Plus encore, alors que la recherche a exploré les divers facteurs de stress des entraîneurs de haute performance (Mallett et Lara-Bercial, 2016), il demeure impératif de comprendre la perspective des athlètes à propos des nombreux éléments uniques du contexte sportif professionnel, tels que l'achat et la vente de joueurs (Elberse & Dye, 2012), ainsi que leur influence sur les dynamiques de groupe. Donc, l'objectif de cette étude était d'explorer les perspectives des athlètes à propos des dynamiques de groupe sur la ligne offensive dans le football nord-américain professionnel, y compris le rôle de l'entraîneur de la ligne offensive. Des entrevues individuelles et semi-structurées ont été menées auprès de six joueurs de ligne offensive dont l'expérience moyenne dans la Ligue Canadienne de Football était de 7,3 années. À l'aide d'une analyse thématique (Braun et al., 2016), les entretiens ont été transcrits textuellement et organisés en codes, thèmes et thèmes généraux. Les résultats de l'analyse ont révélé que les joueurs percevaient plusieurs obstacles à la cohésion propres au contexte du sport professionnel, tels qu'un roulement élevé de joueurs au sein de l'équipe et la perception que les joueurs étaient traités comme de la marchandise. Les athlètes ont également décrit des comportements d'entraîneur adjoint qui favorisaient la cohésion, comme l'ouverture d'esprit et l'adaptabilité, ainsi que des attitudes d'entraîneur qui nuisaient à la cohésion, comme la négativité et les comportements incohérents. De plus, les joueurs ont décrit qu'une relation de travail saine entre l'entraîneur de la ligne offensive et le coordonnateur offensif était essentielle pour atteindre la cohésion sur la ligne offensive. Enfin, les participants ont décrit qu'ils trouvaient que la ligne offensive était leur propre entité au sein de l'équipe et qu'un leadership provenant des athlètes vétérans était essentiel pour un fonctionnement optimal du groupe. Dans l'ensemble, il s'agit de l'une des premières études à inclure un échantillon élite de joueurs de football nord-américain professionnels qui discutent des dynamiques de groupe dans le sport professionnel. Ainsi, ces résultats peuvent aider les organisations professionnelles de football nord-américain à mieux comprendre les dynamiques de groupe, ce qui peut influencer des décisions telles que la sélection et l'échange de joueurs, ou le congédiement d'entraîneurs. Enfin, les résultats de cette étude sont d'intérêts à tous les membres des organisations sportives professionnelles, tels que les directeurs généraux, les entraîneurs-chefs, les entraîneurs adjoints, les membres du personnel de soutien et les athlètes afin de mieux concevoir les rôles des entraîneurs adjoints en ce qui a trait au développement de la cohésion d'équipe et comprendre l'influence des comportements de divers individus sur les dynamiques d'équipe.

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Chapter 1 – Introduction

With a revenue of more than 71 billion U.S. dollars in 2018, the sports market in North America is the largest in the world (Gough, 2021). In this market, there are many different sports leagues, such as the National Football League (NFL), Major League of Baseball (MLB), National Basketball Association (NBA), National Hockey League (NHL), Major League Soccer (MLS), and Canadian Football League (CFL). While each league has unique ways of operating, their ultimate objective is to increase player salaries and profits for team owners (Biner, 2014). Therefore, the leagues have governing bodies that are formed by the owners and players who work together towards maximizing revenue generated through media rights (i.e., television, radio, internet broadcasting), gate receipts (i.e., ticket sales), sponsorships, and merchandising (Gough, 2021). The commercialism that drives the professional sports landscape (Lyle, 2002) motivates individual team owners to maximize team revenue by any means necessary, including on-field winning (Bradbury, 2019). Thus, winning at all costs attitudes can be adopted by members throughout the entire organization (Bennie & O'Connor, 2010), including the coach (Olusoga et al., 2009). In fact, many professional coaches lose their jobs at the end of the competitive season if their team did not live up to expectations on the field of play (Mallett & Lara-Bercial, 2016). Consequently, the pressure and expectation of molding a group of professional athletes into a cohesive unit that produces rapid on-field success becomes a significant coaching challenge (Olusoga et al., 2009).

World class coaching is an inherently stressful environment (Gould et al., 2002) that challenges coaches to remain consistent with important coaching behaviours, such as decision making (Owens & Roach, 2018) and leadership style (Olusoga et al., 2010). In a study exploring job instability and NCAA head football coaches' decision making, Owens and Roach (2018)

found that when the probability of a particular coach firing was high, the level of risk in that coach's decisions tended to decrease. Considering that conservative decision making was the status-quo in NCAA football, it was suggested that coaches likely to be fired regressed towards the status-quo to avoid having their decisions second guessed. Ironically, their attempts to avoid criticism led them towards decisions that decreased their chances of winning (Owens & Roach, 2018), which likely further increased their chances of being fired (Mallett & Lara-Bercial, 2016). Changes in coaching behaviour as a response to the pressures of the job were also observed in a sample of world class coaches (6 men, 6 women, variety of sports) in the United Kingdom (Olusoga et al., 2010). Specifically, these coaches described a wide range of difficult psychological responses associated with the stress of coaching, including negative cognitions (i.e., self-doubts, sleepless nights, worry), emotional responses (i.e., anger, frustration), and a loss of confidence. Consequently, their interactions with athletes were negatively influenced (e.g., losing their temper), and they tended to adopt a more authoritative approach to coaching. Paradoxically, these behaviours likely distanced the coaches from the components of transformational leadership (idealized influence, inspirational motivation, intellectual stimulation, individual consideration) that have been found to be the hallmarks of some of the most successful elite coaches (Bespomoshchnov & Caron, 2017; Hodge et al., 2014; Lara-Bercial & Mallett, 2016; Vallée & Bloom, 2005, 2016). Considering this, professional coaches must be aware of how they respond to the various stressors of their job (Olusoga, 2010), and attempt to remain consistent in their approach. Indeed, research shows that athletes prefer coaches who are emotionally stable and who demonstrate consistent behaviours (Becker, 2009). Furthermore, weekly changes in coach leadership behaviours have been found to affect athlete perceptions of team cohesion (Baird et al., 2020). This is critical, because elite coaches believe

that fostering team cohesion is an important element of their job (Bloom et al., 2003; Cormier et al., 2015).

Taking a closer look at how coaches foster cohesion, Cormier et al. (2015) found that elite Canadian University coaches established short and long-term goals, organized social events, and recruited individuals who aligned with the team's identity. They did this because they felt that cohesion played an integral role in team success and athlete satisfaction. While improving team cohesion seems important in university sports (Bloom et al., 2003; Cormier et al., 2015), it is important to acknowledge that the relationship between cohesion and performance is context dependent (Filho et al., 2014). To that end, Heuzé et al. (2006) studied a sample of professional players from the French National League of Basketball and found that their perceptions of cohesion were not related to performance. However, individual performance was related to increased perceptions of cohesion. This suggested that players with a lot of playing time (better individual performance) had a disproportional influence on team cohesion in professional sports (Bergeles & Hatziharistos, 2003). Therefore, it is possible that coaches at the professional level can optimally enhance cohesion by focusing on a certain group of players. In this respect, Hodge et al. (2014) explored the motivational climate of one of the most successful professional sport teams: The New Zealand All-Blacks rugby team. They found that cohesion was in part developed by means of a player leadership group who regularly met with the coaches. While considering player input during discussions involving the head coach increased alignment and clarity in the world's most successful rugby team (Hodge et al., 2014), this approach might be more difficult in other sports. In this regard, another contextual factor to be considered is the size of the team, whereby team size is inversely proportional to the levels of perceived cohesion (Carron & Eys, 2011). Consequently, enhancing cohesion of a much larger team (i.e., gridiron

football) is likely very challenging for the head coach to accomplish alone, thus requiring help from others. To that end, an examination of one of the most successful NCAA gridiron football coaches, Urban Meyer, demonstrated that he relied on his assistant coaches' opinions when making decisions relating to team dynamics (Gavazzi, 2015). While previous research has investigated how head coaches fostered cohesion in performance coaching contexts (see Bloom et al., 2003; Cormier et al., 2015; De Backer et al., 2011), research has yet to delve into the roles of the assistant coach with regard to cohesion.

In gridiron football, assistant coaches are closer with the athletes and interact more often with them compared to the head coach (Rathwell et al., 2014). Therefore, understanding their roles is important to understand the group dynamics of the team. In a study exploring the assistant coach in football, Rathwell et al. (2014) found that Canadian University head football coaches desired assistant coaches with strong pedagogical and leadership skills in order to effectively manage their sub-unit (positional group). Additionally, Sinotte et al. (2015) demonstrated that assistant coaches in Canadian University football believed an important element of their job was to build relationships with players and recruit student-athletes who fit the team's philosophy. While these studies suggest that the assistant football coach has an important role in group dynamics, there remains a need to understand how the assistant coach develops team cohesion, including from the players' perspective. Exploring these perspectives within a particular positional group is essential because each group presents its own context. Specifically, studying offensive line players is important because they tend to group together due to their unique skillset and continuous physical proximity (Martin et al., 2015). Thus, group dynamics can have a significant influence on football offensive line players.

Purpose of the Study

The purpose of this study was to explore professional athletes' perspectives of the group dynamics on the offensive line in gridiron football, including the role of the offensive line coach. The study focused on answering the following questions:

- 1. How do offensive linemen facilitate or impede cohesion within their sub-unit?
- 2. What is the role of the offensive line coach in fostering cohesion on the offensive line?
- 3. How do offensive linemen interact with other staff members, notably the offensive coordinator and head coach, and how do these interactions influence the group's cohesion?

Significance of the Study

In the Canadian Football League (CFL), each team can have up to 45 players who participate in any given game (Canadian Football League, 2021). Most of the players on a team are categorized as offensive or defensive players. Within the offensive and defensive units, players are split into sub-units (positional groups) that require specific skillsets. Given the number of players on a team and the uniqueness of each positional group, there are many coaches. The head coach supervises overall team functioning, including the tactical decisions made by the special teams, offensive, and defensive coordinators. Among these coaches, the offensive and defensive coordinators also supervise positional coaches who are responsible for the technical coaching of sub-units. The defensive positional coaches include the defensive line coach, linebacker coach, and defensive backs coach, while the offensive positional coaches comprise the quarterbacks coach, running backs coach, receivers coach, and offensive line coach. On the offensive line, five players are aligned side by side with as little as two feet separating each other before the play begins, leaving very little room for error once the play starts. To

organize their collective movement during the play, the players must learn various patterns called blocking schemes. These are designed to protect the quarterback or create space for the running back by blocking defensive players. While these defenders also have pre-established strategies, they can see the football, and this directs their movement. This is not the case for the offensive line, who rather adjusts their blocking schemes based on the defenders' movement. For example, in certain situations, two offensive linemen are tasked with blocking the same defender until the defensive unit begins chasing the offensive ball carrier. At this point, the two offensive linemen must coordinate in real time, one of them leaving to block another defender while the other remains on the initial block. In this sense, the players must be perfectly synchronized, such as a team of rowers, with an added challenge of reacting to an opponent within fractions of a second. Thus, anecdotal evidence overwhelmingly suggests that the offensive line necessitates particularly high levels of cohesion, suggesting that it is a particularly interesting group to study with regard to group dynamics.

While previous research has provided insight into the general roles and characteristics of the assistant coach in football (Rathwell et al. 2014; Sinotte et al., 2015), this study specifically explored their role as they related to group dynamics, and especially the role of the offensive line coach. As such, the findings help offensive line coaches better understand how they influence group dynamics, including perceptions of cohesion, and how these perceptions affect the players. To that end, unlike previous studies on assistant coaches in football (see Rathwell et al. 2014; Sinotte et al., 2015), this study explored the athletes' point of view, providing a new perspective on the expected roles of assistant football coaches. Thus, the findings of this study help head football coaches develop expected roles throughout their coaching staff, particularly with regard to group dynamics. Extending this, considering that the sampled athletes were experienced

professional offensive line players, results provide insight into the potential uniqueness of group dynamics in professional sports. In fact, the results of this study contribute to understanding how certain unique elements of the professional sports context, such as the buying and selling of players (Elberse & Dye, 2012) influence the team's environment (i.e., role perceptions, coordination, motivation). Thus, this study helps professional football organizations consider group dynamics before making personnel decisions with both players and coaches.

Delimitations

The following delimitations were identified for the current study:

- Participants had played football in the intercollegiate or high school context in North America.
- 2. Participants were active offensive linemen in the Canadian Football League (CFL).
- 3. Participants had a minimum of 3 years of professional playing experience in the CFL.

Limitations

The following limitations were identified in this study:

- 1. The results might only be applicable to gridiron football.
- 2. The results might only be applicable to male team sports.
- 3. The results might only be applicable to professional sports.
- 4. The results might only reflect the perspectives of offensive linemen.
- The results were based on player perceptions without considering their coaches' perspectives.
- 6. The results might only be indicative of North American players' views.

Operational Definitions

Canadian Football League (CFL): A professional sports league representing the highest level of gridiron football in Canada. It includes 9 teams separated into two conferences. Each team's roster consists of 45 players, 12 of which are on the field at any given moment. There are typically around 9 assistant coaches per team.

Head Coach: The coach responsible for overseeing the entire football team. The team is comprised of three units: offense, defense, and special teams.

Offensive Coordinator: The coach responsible for managing the offensive unit. This unit includes 12 players typically separated into 4 different sub-units: quarterbacks, receivers, running backs, and offensive line players.

Offensive Line Coach: The coach responsible for the technical development of the 5 players comprising the offensive line sub-unit.

Offensive Line Player: One of the 5 players on the offensive line. These players are aligned side by side in the middle of the offensive unit. Their task is to cohesively block defensive players in order to protect the quarterback or to create space for the running backs.

Team Cohesion: "A dynamic process that is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs." (Carron et al., 1998, p. 213)

Chapter 2 – Literature Review

Team Cohesion

Cohesion is considered a key characteristic of successful groups and has historically been viewed as the most important small group variable (Burke et al., 2014; Golembiewski, 1962; Lott & Lott, 1965). Consequently, many researchers have attempted to define and operationalize it. Festinger et al. (1950) examined group dynamics in student housing at the Massachusetts Institute of Technology and defined cohesion as "the total field of forces that act on members to remain in the group" (p. 164). Two years later, Gross and Martin (1952) argued that the Festinger et al. (1950) definition was too focused on individual perceptions of cohesion. More specifically, Gross and Martin believed that the definition of cohesion should consider the group as whole. Consequently, they defined cohesion as "the resistance of a group to disruptive forces" (Gross & Martin, 1952, p. 553). Later, Lott and Lott (1965) also described cohesion as a group property which related to the number and strength of positive attitudes among teammates. Despite these advancements, Mudrack (1989) argued that the available research on cohesion produced inconsistent and conflicting findings, and inadequate definitions. In fact, Mudrack claimed that some definitions – while focusing on the group – were impossible to operationalize (i.e., Gross & Martin, 1952; Lott & Lott, 1965). On the flip side, other definitions were easier to operationalize, but focused on individuals at the expense of the group (i.e., Festinger et al., 1950). Consequently, researchers needed to examine individual team members in order to gain knowledge about the team as a whole. These one-dimensional definitions of cohesion (i.e., focusing on the individual or the group) presented a major limitation to research on cohesion. To that end, Carron et al. (1998) argued that the unidimensional definitions of cohesion failed to distinguish between the group and the individual and between the social and task components of

a group and its members. Carron (1982) reasoned that the definition of cohesion needed to include both the group/individual and task/social orientations (Loughead & Bloom, 2013). Therefore, Carron et al. (1985) defined cohesion as "a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its goals and objectives" (p. 259). Adding an affective dimension to this definition, Carron et al. (1998) defined cohesion as "a dynamic process that is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs" (p. 213). This definition is currently the most widely used and accepted definition of cohesion in sport research (Loughead & Hardy, 2006).

Multidimensional Model of Cohesion. Using Carron's (1982) definition of cohesion, Carron et al. (1985) created the conceptual model of cohesion, based on three central assumptions (Loughead & Bloom, 2013). First, group cohesion can be evaluated through the perspective of individual group members. For instance, teammates interact with one another in a variety of situations and develop shared beliefs about their team through these interactions.

Second, there must be a distinction between the group (i.e., Group Integration) and the individual (i.e., Attractions to the Group) when assessing cohesion. For example, team members can have their own perspective of the group and their own evaluations of the degree to which the group satisfies their personal needs. Third, the team members have both task-oriented and socially-oriented motivations (Loughead & Bloom, 2013). The task orientation refers to the team's coordination towards achieving group objectives (i.e., score 3 goals a game, average 400 yards a game). Conversely, the social orientation defines the team's willingness to engage in social activities and to maintain social relationships among team members (i.e., team bonding, long lasting friendships). In sum, the three assumptions describe how group cohesion is based on the

team members' perspectives of the group's unity, as both a social unit and a task-oriented group.

This perspective then satisfies – or dissatisfies – team members' personal needs.

Based on the aforementioned assumptions, Carron et al. (1985) created a conceptual model of cohesion that includes four dimensions: (1) *Individual Attractions to the Group-Social (ATG-S)*, (2) *Individual Attractions to the Group-Task (ATG-T)*, (3) *Group Integration-Social (GI-S)*, and (4) *Group Integration-Task (GI-T)*. First, the ATG-S dimension describes whether each individual feels personally accepted within the group. Second, the ATG-T dimension refers to the attractiveness of the group's task related goals to the individual on a personal level. Third, the GI-S dimension represents the individual's perception of the closeness, bonding, and interaction within the entire group as a social unit. Finally, the GI-T dimension describes the individual's perceptions of the whole group's closeness, bonding, and interaction towards achieving team goals.

Building off the conceptual model of cohesion, Carron et al. (1985) created the Group Environment Questionnaire (GEQ). The GEQ is an 18–item inventory used to assess athletes' perception of the four dimensions of team cohesion (Loughead & Bloom, 2013). Specifically, the ATG-S section is comprised of five items, such as "some of my friends are on this team." The ATG-T section contains 4 items of the questionnaire with statements like "I do not like the style of play on this team." The GI-S section also has 4 items, including statements of the type "members of our team would rather go out on their own than get together as a team." Lastly, the GI-T section consists of 5 items, such as "our team is united in trying to reach its goal for performance" (Jowett & Chaundy, 2004). All items are measured on a Likert scale ranging from 1 (strongly disagree) to 9 (strongly agree). Since its conception, the GEQ has been the most widely used tool to assess cohesion in sport (Loughead & Bloom, 2013), likely because it has

proven to be a valid and reliable measure of cohesion (Carron et al., 1998). Consequently, it has been used in many studies assessing cohesion (Carron, Colman, et al., 2002), including inquiries exploring the relationship between cohesion and performance in adult sport settings.

Cohesion and Performance. In high performing interdependent organizations, a topic of interest is whether cohesion assists in the group's performance. In an attempt to answer this question, Mullen and Copper (1994) conducted a meta-analysis exploring group cohesion across various settings such as business, the military, and sport. Overall, the researchers found a cohesiveness-performance effect that was a highly significant and of small magnitude (Mullen & Copper, 1994). Interestingly, they found the strongest relationship between cohesion and performance in sport teams. To further explore this relationship, Carron, Colman, et al. (2002) conducted a meta-analysis to summarize the cohesion-performance relationship in sports. Overall, they uncovered a significant, moderate to large bidirectional relationship between cohesion and performance. Indeed, the results not only suggested that higher cohesion was related to better performance in sports teams, but that increased cohesion could also be a result of better performance. A particular strength of the meta-analysis was the ability to highlight various moderator variables. In this case, they analysed cohesion type (task and social), gender, sport type (coactive and interactive), and competition level. Some differences were found while examining these variables, including a stronger relationship between cohesion and performance in female athlete/sport teams compared to their male counterparts. However, the overall results indicated that the relationship found between both constructs transcended the moderators they had analysed (Loughead & Bloom, 2013). In other words, cohesion was found to be beneficial to sport performance independently of the context in which their relationship was studied.

A second meta-analysis was conducted by Filho et al. (2014), who analysed 16 studies published between 2000-2010 to examine the direction and magnitude of the cohesion-performance relationship, and its possible moderators. Although the relationship's magnitude was smaller than what Carron, Colman, et al. (2002) found, the results revealed a statistically significant moderate relationship between cohesion and performance. Additionally, the emergence of various significant moderators of the cohesion-performance relationship were highlighted whereby cohesion type (task and social) and athlete skill level (i.e., high school, inter collegiate) influenced the magnitude of the cohesion-performance relationship. Specifically, the researchers found a large relationship between task cohesion and performance and a small relationship between social cohesion and performance. Additionally, cohesion had a larger influence on the performance of college and recreational athletes (r = 0.40, p < 0.01, r = 0.43, p < 0.02, respectively) compared to high school and professional athletes (r = 0.13, p < 0.10, r = 0.19, p < 0.01, respectively) (Filho et al., 2014). In sum, this analysis demonstrated the potential uniqueness of the cohesion-performance relationship in different sporting contexts.

Comparing studies exploring the cohesion-performance relationship helps highlight the contextual distinctiveness of its direction and magnitude. For example, while examinations of competitive adult samples consistently reveal a positive bidirectional relationship between cohesion and performance, this bidirectionality may not be present in elite youth sport (Benson et al., 2016). While studying elite European youth soccer teams, Benson et al. (2016) found that mid-season performance was a positive predictor of late-season cohesion, but cohesion was not a predictor of later performance. This non-reciprocal relationship between performance and cohesion has also been suggested in research examining professional sports. To that end, Heuzé et al. (2006) examined the relationship between cohesion, collective efficacy (i.e., perceptions of

collective competency), and performance in professional sport teams. The participants in this study were male basketball players from 17 teams involved in the first or second division of The French National League of Basketball. Overall, the results suggested that collective efficacy mediated the relationship between cohesion and performance, and that cohesion (GI-T) only appeared as a result of prior individual performances. In other words, performance influenced cohesion, but the relationship was not reciprocal. Furthermore, the researchers suggested that coaches in professional sport evaluated team results by means of individual statistics. Therefore, players with good individual results often experienced more playing time. Consequently, these players felt more involved in team functioning and success, and perceived higher levels of task cohesion as a result of increased playing time. In another similar study, Bergeles and Hatziharistos (2003) studied cohesion with professional male Greek volleyball teams. Among their findings, starting players perceived higher cohesion within the task and social dimensions of interpersonal attractions to the group compared to non-starters (those with less playing time). In fact, perceptions of task cohesion amongst players with little playing time was mostly absent. Therefore, while the task dimension of the team was positively correlated to the team's final placing in the standings, it was almost exclusively influenced by the starting players. Considering the influence of starting players (i.e., more skilled players) in professional sport, these findings suggest that cohesion in professional sport might be dependant on players' individual performances (Heuzé et al., 2006).

The weak relationship that exists between cohesion and performance in professional sports (Filho et al., 2014) is contrasted in other high-performance contexts, such as intercollegiate sport (Carron, Bray, et al., 2002) & Olympic (Din et al., 2015; Greenleaf et al., 2001). For example, Carron, Bray, et al. (2002) assessed 18 Canadian intercollegiate basketball

and 9 club soccer teams' perceived levels of task cohesion. The members of these teams were men and women between 15 and 30 years of age, most with considerable competitive playing experience at the intercollegiate level. After measuring for team cohesion, the researchers found a strong relationship between cohesion and winning percentage (Carron, Bray, et al., 2002). At the Olympic level, Din et al. (2015) conducted a qualitative study that explored Olympic medal winning athletes and coaches' (3 female coaches, 7 male coaches, 6 female athletes, and 6 male athletes from individual and team sports) perspectives on how podium performances were achieved. Among the findings, the coaches and athletes described how many different stakeholders influenced performance (i.e., assistant coaches, strength and conditioning experts, sport psychologists, nutritionists). Therefore, fostering cohesion between all stakeholders through effective communication and setting group goals was essential to Olympic success (Din et al., 2015).

In sum, evidence suggests that there is a significant relationship between cohesion and performance in elite sport (Carron, Colman, et al., 2002; Filho et al., 2014). However, the magnitude and the direction of the relationship seems to be dependent on contextual factors, including the level of competition (Benson et al., 2016; Filho et al., 2014). Considering that coaches' behaviours play an important role in the overall functioning and environment of the team (Bloom et al., 2003; Hague et al., 2021), understanding these contextual differences is critical. For example, while coaches seeking to improve athlete and team performance should try to enhance team cohesion, the return on this investment with regard to team success might not be equal at all levels of competition. For instance, while increasing overall team cohesion in a University football team might greatly impact on-field performance, the improvement of on-field performance might be much smaller in a professional team setting. In fact, coaches in

professional sport might be better suited to allocate more time monitoring the starting players because they have a disproportionally larger influence on team cohesion and performance (Bergeles & Hatziharistos, 2003; Heuzé et al., 2006). All things considered, specifically exploring each level of competition is necessary to fully understand effective coaching practices.

Coaching

Serial Winning Coaches' Knowledge. Highly successful coaches in high performance contexts have been labeled as serial winning coaches (SWC) (Lara-Bercial & Mallett, 2016; Mallett & Lara-Bercial, 2016). SWC have been defined as "coaches who have, repeatedly and over a sustained period of time, coached teams and athletes to gold medals at the highest level of competition such as the Olympic Games, the World Championships, or major professional leagues" (Mallett & Lara-Bercial, 2016, p. 294). Recently, researchers have begun examining the coaching knowledge and environmental factors influencing SWC (e.g., Hodge et al., 2014; Mallett & Lara-Bercial, 2016; Urquhart et al., 2020; Vallée & Bloom, 2005, 2016). For example, Hodge et al. (2014) conducted a case study of the motivational climate created by The New Zealand All-Blacks. They studied the All Blacks from 2004 to 2011 when the team achieved a remarkable winning percentage of 85%, including a Rugby World Championship in 2011. Coached by Graham Henry (head coach) and Wayne Smith (assistant coach), the historically dominant All-Blacks had deviated from their winning ways. Upon their arrival with the All-Blacks, Henry and Smith realized that they needed to create a new team culture that would foster success. Therefore, they came up with a coaching vision that they coined "Better people make better All-Blacks." Consequently, the two coaches emphasized the holistic development of the individuals on the team, prioritizing both individual behaviour and talent when selecting players. Additionally, empowerment of all team members was facilitated by a non-hierarchical coaching

team who shared leadership responsibilities with the players. These group dynamics helped achieve open lines of communication between the players and the coaches, resulting in greater alignment and clarity. Overall, through an inspiring vision relating to personal accountability and growth, Henry and Smith drove a cultural change within the team that propelled an on-field turnaround (Hodge et al., 2014; Kerr, 2013).

Many coaches who have built successful programs took over poor performing programs upon their arrivals (e.g., Elberse & Dye, 2012; Vallée & Bloom, 2005, 2016). To gain more information on this topic, Vallée and Bloom (2005) interviewed five expert Canadian female basketball and volleyball coaches who had taken over poor performing University teams that became provincial and/or national champions. The results helped the researchers develop a "conceptual model of expert coaches' perspectives on building successful programs" (p. 185). Specifically, this model includes four components that likely enable expert coaches to build a successful program: coaches' attributes, individual growth, organizational skills, and coaching vision. In their study, Vallée and Bloom (2005) found that coaches' attributes related to their commitment to learning and acquiring knowledge. However, the coaches never used that knowledge to overpower the athletes. On the contrary, these coaches emphasized empowering the athletes and imparting as much knowledge as possible to them. This allowed coaches to foster individual growth in each athlete by equipping them with the skills, strategies, and behaviours to become a champion on and off the court. In fact, even though these coaches had led their teams to become perennial contenders on the court, all of them stated that their ultimate goal was to develop well rounded individuals. To achieve this objective, these coaches used their well-developed organizational skills. Specifically, they elaborated detailed plans for each season, game, practice, and recovery day. Moreover, administrative tasks such as recruiting reliable

people were essential organizational skills of SWC. The three previous themes (coaches attributes, individual growth, and organizational skills) were linked together by the *coaches' vision*. Coaching vision included the goals and direction of the programs, as well as the coaches selling their philosophies to their athletes. In all cases, individual growth was the driving force behind the vision. Overall, the coaches' vision provided the foundation to the holistic development of athletes, which likely contributed to the building of perennial national championship contenders.

As the prior two studies suggested (i.e., Hodge et al., 2014; Vallée & Bloom, 2005), SWC in elite sport focused on more than just winning championships. In fact, empowering the athlete to become a well-rounded individual was a cornerstone to their coaching vision. In this sense, these coaches demonstrated that they cared about the athletes not only as performers, but as individuals. This facilitated a positive relationship between the coach and the athletes, which in turn had a significant influence on team cohesion. For example, Jowett and Chaundy (2004) found that coaches who maintained good relationships with their athletes fostered higher perceptions of cohesion within their teams. In sum, fostering cohesion toward group goals through athlete empowerment is a strategy used by some of the world's most successful elite coaches (Lara-Bercial & Mallett, 2016; Urquhart et al., 2020). Additionally, emphasizing the holistic development of the athlete is another common coaching philosophy among SWC that increases their coaching effectiveness (e.g., Hodge et al., 2014; Vallée & Bloom, 2005, 2016).

Coaching Effectiveness and Expertise. The study of coaching science has been influenced by Côté and Gilbert's (2009) integrated definition of coaching effectiveness. The first component of the definition is *coaches' knowledge*, which includes three types of knowledge: professional (i.e., sport-specific and pedagogical knowledge), interpersonal (i.e., the ability to

interact with others), and intrapersonal (i.e., the ability to be introspective and reflective). Elite coaches continuously increase their knowledge by being passionate about coaching, continuously seeking self improvement, having high emotional intelligence, and engaging in deep personal reflection (Donoso-Morales et al., 2017; Duchesne et al., 2011; Heelis et al., 2020; Kim et al., 2016; Lara-Bercial & Mallett, 2016; Vallée & Bloom, 2005, 2016). Undoubtedly, this knowledge influences the second component of Côté and Gilbert's (2009) definition of coaching effectiveness: athletes' outcomes. Athlete outcomes involves coaches helping athletes improve their competence, confidence, connection, and character (i.e., holistic development). A coach's ability to improve athlete outcomes is dependent on the unique settings in which the coach operates, which is referred to as the *coaching context* (Côté & Gilbert, 2009). The coaching context is the third component of effective coaching and comprises participation and performance coaching. In participation coaching, increasing participant enjoyment and improving health related outcomes is prioritized over performance in competition. On the other hand, performance coaching is a context that presents many unique demands to coaches with regard to improving athletes' outcomes. In fact, because competition performance is an important athlete outcome, effective performance coaches must possess the knowledge to prepare their athletes physically, tactically, technically, and mentally for competition (Bloom, 2002). Moreover, these coaches must know how to effectively behave throughout all the stages of competition (i.e., pre-competition, during competition, post-competition). While knowing how to prepare athletes for competitions and behaving the right way during these contests are critical tasks for high-performance coaches, organizational abilities are perhaps even more crucial (Bloom, 2002). In fact, coordinating elite performance involves several elements such as effective leadership skills, managing organizational operations, developing a vision, and creating

a team culture (Fletcher & Arnold, 2011). Therefore, being an effective coach in a high-performance context – such as Olympic, professional, or University sport – necessitates an abundance of coaching knowledge. Additionally, the high-performance context presents many unique challenges that can impede effective coaching.

Challenges of Coaching in High-Performance Contexts. While applying coaching knowledge to improve athletes' outcomes is the main task of a coach (Côté & Gilbert, 2009), high-performance coaches are also considered performers themselves (Gould et al., 2002). In fact, these coaches are often held accountable to produce winning outcomes (Mallett & Côté, 2006; Mallett & Lara-Bercial, 2016) even when external factors beyond their control – such as injuries or the lack of experienced players on a team – negatively affect success (Mallett & Côté, 2006). This generates a highly pressurized coaching context with many stressors. Nevertheless, high performance coaches must be able to regulate their emotions. In fact, regulating one's emotions is important because athletes tend to model their coaches. If an athlete notices that their coach is anxious, they may become more nervous and consequently not perform to the best of their abilities (Gould et al., 2002). Therefore, while effective coaching includes helping athletes control their emotions leading up to important competitions (Donoso-Morales et al., 2017), high performance coaches have the added challenge of successfully masking their anxiety towards the serious outcome of victories and championships.

The inability to deliver winning performances often result in coaches losing their jobs by the end of the competitive season (Mallett & Lara-Bercial, 2016). This creates a highly volatile coaching environment that has significant implications for individual and team outcomes (Mallett & Lara-Bercial, 2016), and affects the coach's ability to implement his/her coaching vision. To that end, Urquhart et al. (2020) explored how multiple championship winning expert

ice hockey coaches developed, articulated, and implemented their coaching vision. Urquhart et al. (2020) compared a clearly articulated vision to a compass that guides a team towards longterm success. Indeed, the coaches in this study believed that success was achieved over a long period of time (Urquhart et al., 2020). This highlights the challenges of professional sport coaches who have short windows of time in which they must produce winning performances. An additional challenge that many professional high-performance coaches encounter is their lack of coaching experience. Indeed, many professional sport teams hire coaches based on their athletic success (Côté & Gilbert, 2009) and fail to help them develop their coaching competencies (Mallett et al., 2016). This reality contradicts what empirical evidence suggests about the makeup of highly successful coaches. In their research on expert ice hockey coaches, Urquhart et al. (2020) found that these coaches all had a wealth of experience before becoming head coaches for the first time. This experience included graduate studies in education, psychology, or business, and time as an assistant coach in a successful program. Considering this information, a lack of coaching experience undoubtedly puts many high-performance coaches in a disadvantageous position for early and sustained success, which certainly exacerbates the coaching volatility in this context.

A high turnover in personnel poses serious challenges to the group dynamics of professional sporting organizations. Moreover, because winning is highly emphasized in professional sports, it is believed that team cohesion is considered as a lesser priority (Bloom et al., 2003). However, research shows that elite coaches believe that team cohesion plays an integral role in team success (Cormier et al., 2015). In a study exploring how elite Canadian cross-country coaches applied their coaching knowledge to influence team cohesion, Cormier et al. (2015) found that these coaches fostered cohesion by establishing short and long-term goals,

organizing social events, establishing clear roles, and recruiting individuals who aligned with the team's identity. In professional sport, aligning individuals to the team's identity can be a difficult task. In fact, professional sport leagues are markets in which teams can buy, sell, and trade players (Elberse & Dye, 2012). This creates an environment in which some players are more interested in individualistic goals – such as making more money – compared to team outcomes. Additionally, stakeholders such as agents who negotiate on the athletes' behalf are members of the athletes' social networks and their influence on the athlete must be taken into consideration when attempting to create athlete buy-in to the team's vision (Heelis et al., 2020). Moreover, the varying salaries between the players on a team can certainly cause intra-team jealousy, which in turn influences cohesion (Kamphoff et al., 2005).

In sum, high-performance coaches face many challenges such as being judged as performers themselves (Gould et al., 2002), the constant threat of losing their jobs (Mallett & Lara-Bercial, 2016), a lack of coach training (Lara-Bercial, 2016), and dealing with individually motivated performers (Heelis et al., 2020). Taken together, the complexity of this environment makes it incredibly challenging for a head coach to positively influence the group dynamics. Considering all these challenges, head coaches in a high-performance context must be able to delegate tasks to assistant coaches to get a better feel for the team environment (Elberse & Dye, 2012; Gavazzi, 2015; Hodge et al., 2014).

Roles of the Coach in Gridiron Football. In gridiron football, assistant coaches are closer with the athletes and interact more often with them compared to the head coach (Rathwell et al., 2014). Therefore, understanding their role is important to understand the group dynamics of the team. In a study exploring the assistant coach in football, Rathwell et al. (2014) found that Canadian University head football coaches desired assistant coaches with strong pedagogical and

leadership skills. Additionally, the assistant coaches were hired based on having extensive football knowledge that complemented the head coach's skillset. The head coaches described that the major roles of the assistant coaches consisted of developing athletes, managing a major sub-unit, and recruiting. In a subsequent study, Sinotte et al. (2015) explored assistant football coaches' perspectives of their own roles and responsibilities within a coaching staff. The results demonstrated that assistant coaches in Canadian University football believed that recruiting student-athletes that fit the team's philosophy was a critical element of their job. This finding highlights the importance of the assistant coach with regard to group dynamics and team success. Indeed, recruiting individuals who align with the team's philosophy helps develop optimal team cohesion (Cormier et al., 2015) and is a cornerstone to winning programs (Hodge et al., 2014; Vallée & Bloom, 2005, 2016). Additionally, Sinotte et al. (2015) found that assistant coaches believed in the value of building relationships with the head coach and the athletes on the team. While building positive relationships with the athletes can help improve team cohesion (Jowett & Chaundy, 2004), it also allows the assistant coaches to monitor the team's functioning. In fact, because assistant coaches are socially closer to the athletes compared to the head coach, they have a unique perspective on the formation of subgroups within the team (Martin et al., 2016). While the formation of subgroups is inevitable in sport (Wagstaff et al., 2017), the structure of gridiron football can intensify subgroup formation. Specifically, the different positional groups on the team necessitate unique skillsets. Therefore, members of each positional group spend a lot of time together training towards acquiring the similar physical and technical demands of the position. Thus, the formation of subgroups due to constant proximity and similarity of positional group members is inevitable (Martin et al., 2015). This can have positive effects on the team, as subgroups have the potential to satisfy individual needs (i.e., acceptance, connection) that cannot

be met by the larger group (Martin et al., 2015). However, the effects can also be negative if the subgroups become 'cliques' by demonstrating exclusive and anti-social behaviours (Wagstaff et al., 2017). Therefore, assistant coaches are important towards managing the dynamics of the different subgroups on a team by ensuring they are working towards a common goal. For this reason, it is critical for the head coach and the assistant coaches to agree on components such as team vision (Sinotte et al., 2015). In turn, the assistant coaches convey the right message to the players in their positional groups (i.e., subgroups) in their many interactions with them (Rathwell et al., 2014). These interactions set the stage for effective athlete leadership.

Athlete Leadership

Athlete leaders are those who influence team members to achieve a common goal by occupying a formal (i.e., team captain) or informal (i.e., leader that emerges based on interactions with team members) role within a team (Loughead et al., 2006). Coaches seem to understand the importance of athlete leadership to complement their own leadership. In fact, coaches carefully select formal athlete leaders and devote a lot of time towards fostering relationships with them (Bucci et al., 2012). These relationships are important, because open lines of communication between the coach and athlete leaders increase player buy-in to team objectives (Bucci et al., 2012; Heelis et al., 2020). Consequently, formal leaders are expected to behave in ways to improve team climate, norms, and functioning (Dupuis et al., 2006). In other words, athlete leaders attempt to positively influence their team's cohesiveness (Dupuis et al., 2006).

Influence of Athlete Leaders. Although coach leadership has been found to directly affect cohesion more than athlete leadership, the indirect effects of athlete leadership on cohesion are significant (Fransen et al., 2016). In fact, athlete leadership has an impact on collective

efficacy, which in turn influences team cohesion (Fransen et al., 2016). Furthermore, while both athlete and coach leadership are related to task cohesion, social cohesion is more strongly influenced by athlete leadership behaviours (Price et al., 2013). The specific leadership behaviours that enabled athlete leaders to foster cohesion in elite team sports were explored by Vincer and Loughead (2010). Using a modified version of the Leadership Scale for Sports (Chelladurai & Saleh, 1980), their results suggested that athlete leader behaviours of instruction and social support were positively associated with both task and social cohesion. Furthermore, democratic behaviours from leaders related to increased task cohesion. Conversely, autocratic leader behaviour was negatively related to all four dimensions of cohesion (i.e., ATG-S, ATG-T, GI-S, & GI-T). These findings highlight some important practical implications. First, to increase perceptions of cohesion within a team, athlete leaders should be encouraged to work hard toward helping their teammates improve their skills. Second, they should be aware of the importance of asking for their teammates' opinions and feelings, while avoiding adopting a highly authoritative role. Lastly, coaches must educate their athlete leaders on how to develop positive relationships with their teammates (Vincer & Loughead, 2010). While these findings present information regarding effective athlete leadership behaviours, the specific roles fulfilled by athlete leaders are also important for effective team functioning.

Athlete Leaders' Roles. Athlete leadership can be categorized in many ways, including distinguishing the roles that they occupy (Cotterill & Fransen, 2016). Four different leadership categories can be used to understand the different tasks of athlete leaders (Fransen et al., 2014). Specifically, in a study exploring leadership classification and the importance of the team captain as a formal leader, Fransen et al. (2014) specified that athlete leaders can fulfill two on-field leadership roles (task and motivational) and two off-field leadership roles (social and external).

On the field of play, a task leader is in charge, helps the team focus on its goals, and provides tactical advice to their teammates when necessary. On the other hand, a motivational leader encourages team members to push to extremes and helps effectively direct emotions for the team to optimally perform. Off the field of play, a social leader promotes good relationships on the team and influences the team environment by organizing social activities, listening to teammates, and helping to deal with conflicts. The one type of leader that does not deal with internal team affairs is the external leader. This leader is the link between the team and the outside world, including management and the media. Having these different leadership roles spread throughout the team is important as it appears difficult for a team captain to fulfill more than one of these roles. To that end, Fransen et al. (2014) found that nearly half of the participants in their study did not perceive their team captain (i.e., formal leader) as the primary leader in any of the four roles. Consequently, leadership is spread throughout the team, and their roles are fulfilled by both formal and informal leaders (Fransen et al., 2014). Informal roles arise as a result of interactions among team members (Kim et al., 2020) and are an integral part of the structure of the group (Cope et al., 2011). For this reason, Cope et al. (2011) studied informal roles in a sport setting with the aim of identifying and describing the different roles on a team. Interestingly, they found twelve different informal roles on a team. Specifically, three informal roles were perceived as detrimental to team functioning (cancer, malingerer, distracter), and nine were regarded as beneficial (i.e., mentor, spark plug, team player) for sports teams. Although the findings could not infer how each informal role specifically influenced different team contexts, it was suggested that informal roles generally had an influence on group constructs such as athlete satisfaction and group cohesion.

Overall, evidence suggests that certain leadership behaviours (i.e., social support, instruction, democratic behaviours) positively influence team cohesion (Vincer & Loughead, 2010). From a practical perspective, attempts to positively influence team cohesion can often come from coach appointed formal leaders (Bucci et al., 2012). However, evidence suggests that relying on the leadership of a select few formally appointed leaders is not sufficient for optimal team functioning (Fransen et al., 2014). Rather, a widespread of both formal and positive informal leaders throughout the team seems beneficial. Indeed, shared athlete leadership helps diversify the leadership group and allows team leaders to fulfill the task, motivational, social, and external roles within a team (Fransen et al., 2014).

METHODS 28

Chapter 3 – Methods

Qualitative research is a form of inquiry that uses textual, audio, or visual data to interpret patterns of meaning in peoples' experiences and perceptions of their social reality (Denzin & Lincoln, 2011; Sparkes & Smith, 2014; Tamminen & Poucher, 2020). Given the numerous approaches and perspectives in qualitative research, rigor is achieved in part by means of methodological coherence (Poucher et al., 2020; Tamminen & Poucher, 2020), or in other words, the "congruence between your epistemological and ontological viewpoint, your theoretical position/perspective, the methods you choose and so on" (Mayan, 2009, p. 13). Thus, this chapter will address the philosophical assumptions followed by the qualitative methodology and methods that guided this study.

Philosophical Assumptions

A research philosophy represents a worldview that guides a researcher through the inquiry process (Guba & Lincoln, 1994). There are several philosophical positions, each of which are guided by questions about the nature of reality (ontology) and knowledge (epistemology) (Tamminen & Poucher, 2020). The perceptions one holds about the nature of reality is referred to as ontological assumptions and positions the researcher anywhere between realism and relativism (Sparkes & Smith, 2014; Tamminen & Poucher, 2020). A realist ontological position assumes that there is a singular reality about the world that can be accurately measured and understood (Tamminen & Poucher, 2020). Conversely, relativist ontological assumptions categorize reality as multifaceted and are dependent on the interpretations of those experiencing it (Sparkes & Smith, 2014). Naturally, ontological positioning constrains one's epistemological assumptions (Guba & Lincoln, 1994), which are referred to as the beliefs one holds about the nature of knowledge and its production (Tamminen & Poucher 2020). The

epistemological positioning can be placed between objectivist/dualist and subjectivist/transactional (Guba & Lincoln, 1994). An objectivist/dualist epistemology refers to the belief that it is possible to have a complete separation between the researcher and the research 'object' (Sparkes & Smith, 2014). Therefore, it is assumed that a researcher can produce 'objective' knowledge by being a detached observer who does not influence the phenomenon at study, and who is not influenced by it (Guba & Lincoln, 1994; Tamminen & Poucher, 2020). Conversely, a subjective/transactional epistemology assumes that knowledge generation is never theory or value free, and that one's subjectivity is impossible to remove from the research process (Tamminen & Poucher, 2020). This assumption accepts that researcher and researched are interdependent and that knowledge is co-constructed by means of interactions (transactions) between them (Sparkes & Smith, 2014; Tamminen & Poucher, 2020). Thus, both parties' lived experiences and values undoubtedly influence the direction of the study.

This study was conducted within a *constructivist paradigm* guided by ontological *relativism* and epistemological *subjectivism*. Therefore, knowledge was co-constructed through a transactional and dialectical process between the participant and researcher (Guba & Lincoln, 1994). Indeed, rather than adopting the role of a 'dispassionate scientist', the researcher adopted the role of a 'passionate participant' within a constructivist paradigm (Sparkes & Smith, 2014). This role was relevant in the current study because the lead researcher had prior experience as an elite offensive line football player, having accumulated more than 12 years of playing experience at the high school, intercollegiate, and professional levels. Additionally, the researcher has spent the last four years as the offensive line coach for the men's varsity football team at McGill University. Therefore, the lead researcher could not entirely separate himself from the subject matter, which aligns with the philosophical position of constructivism. Indeed, the researcher's

lived experience as a player and coach inevitably shaped the direction of the study and contributed to the co-construction of knowledge relevant to the research questions.

Methodology

Within the realm of qualitative research, there are multiple approaches that help guide data collection and analysis, including ethnography, grounded theory, life history and narrative, critical ideological research, case study, phenomenology, and generic qualitative research (Bradbury-Jones et al., 2017; Creswell, 2013; Sparkes & Smith, 2014). Generic qualitative research attempts to understand and represent how people interpret and attribute meaning to their lived experience (Bradbury-Jones et al., 2017; Kahlke, 2014). Furthermore, a generic approach allows for flexibility concerning the researcher's chosen methods, if coherence is maintained through all stages of the research process (Kahlke, 2014; Thorne et al., 2004). To that end, in their analysis of methodological coherence in qualitative research, Bradbury-Jones et al. (2017) found that studies employing a generic approach generally achieved higher levels of alignment between methodology and methods compared to other approaches. As such, to ensure maximal rigor by means of methodological coherence (Poucher et al., 2020; Tamminen & Poucher, 2020), this study used a generic qualitative approach.

Considering that this study was situated in a constructivist paradigm, and it attempted to understand individuals' interpretations of their experiences as professional football players, a generic qualitative approach was an appropriate methodological choice (Kahlke, 2014).

Moreover, this study explored athletes' thoughts about the various influencers of the group dynamics in professional sport rather than exploring their internal processes per se (i.e., anger, sadness) about the topic, thus making the generic qualitative approach a suitable option (Percy et

al., 2015). Thus, this study's philosophical assumptions and purpose were both tightly aligned with a generic qualitative approach, which then guided the remainder of the research process.

Participants

Sampling is a process wherein researchers make decisions regarding individuals or groups of individuals, events, times, and places that are the best suited to answer research questions (Sparkes & Smith, 2014). Qualitative research typically focuses on an in-depth analysis of a relatively small, and purposefully selected group of individuals who can provide rich information about the phenomenon of interest (Patton, 2015; Sparkes & Smith, 2014). *Purposive sampling* comprises various subtypes, including criterion-based sampling whereby a pre-established set of criteria is conceived as a means to choose participants who are most relevant to the purpose of the study (Patton, 1990). This study employed *criterion-based sampling* to study a small sample of individuals' understandings of their lived experiences. Although generic qualitative studies can involve up to 15 participants (Bradbury-Jones et al., 2017), this study involved a smaller number of participants in order to achieve substantive contribution and width by means of a truly elite sample (Smith et al., 2014).

The current study sampled six experienced professional offensive line players from the Canadian Football League (CFL). Participants were selected because they: a) were an active offensive line player in the CFL; b) had a minimum of 3 years of professional experience; and 3) had played football in the intercollegiate or high school context in North America. While these criteria delimited the minimal requirements for participant selection, offensive line athletes with the most extensive professional experience in the CFL, including being identified as leaders on their team, were prioritized during the selection process. As such, while the average career length of professional gridiron football players is 3.3 years (Gough, 2019), this sample's average

experience was 7.3 years. Taking a closer look at the criteria's relevance to the research questions, this elite sample of participants provided in depth accounts of their current and past experiences regarding group dynamics on a professional offensive line. Moreover, they were in a position to provide insight into how the professional context compares to other environments they had experienced, such as intercollegiate and/or high school football.

Procedures. After obtaining approval from the McGill Research Ethics Board, the lead researcher began contacting his personal network that he had built through his experience as a football player and coach. This network included professional football administrators, coaches, scouts, player agents, and players. With the help of this network, the researcher identified participants who met the selection criteria. Potential participants were reached via email or social media with a recruitment script (Appendix A). Following this, a consent form was sent to the players who agreed to participate in the study (Appendix B). Considering the state of the Covid-19 pandemic at the time of the interviews, virtual interviews were scheduled with each participant at their preferred time. Prior to the first interview, one pilot interview with an exuniversity football player was conducted. This helped the lead researcher develop his interviewing skills, and to evaluate the effectiveness of the interview guide. The research supervisor provided feedback about the lead researcher's interviewing skills before the first interview considered for data collection was conducted. Each interview was transcribed verbatim shortly after completion.

Data Collection

Interviews. A wide variety of data collection options are available in qualitative research, including interviews, observational methods, vignettes, and internet research (Sparkes & Smith, 2014). The most widely used option to collect qualitative data in the sport and exercise sciences

is the interview (Smith & Sparkes, 2016). The interview can be described as a social activity where people engage in the co-construction of knowledge about themselves and their social world by means of a contextualized interaction (Sparkes & Smith, 2014). The purpose is to create a discussion in which the participant reveals experiences, behaviours, insights, and emotions related to the research questions (Smith & Sparkes, 2016). Four generic forms of interviewing can generally be distinguished, and these distinctions relate to differences in number of participants and structure (Smith & Sparkes, 2016). With regard to the number of participants, the focus group involves multiple participants at the same time while the individual interview involves a single participant. These individual interviews vary in structure, and involve the structured interview, the unstructured interview, and the semi-structured interview (Smith & Sparkes, 2016).

For this study, semi-structured open-ended interviews were used in order to provide the researcher with enough structure to collect pertinent information about the research topic. Simultaneously, the open-ended structure gave the participants the flexibility to reveal the detailed meanings they attached to their experiences (Sparkes & Smith, 2014). Specifically, the study used a responsive interviewing model (Rubin & Rubin, 2012), in which the interviewer and interviewes were conversational partners. As such, the semi-structured nature of the interviews left room for unplanned questions, and therefore supported the researcher's epistemological position by providing opportunities to co-construct additional insights as the conversations unfolded (Smith & Sparkes, 2016). On average, the interviews lasted 83 minutes, with the shortest and longest interviews lasting 78 minutes and 91 minutes respectively. Furthermore, to elicit further details after each interview, the researcher made reflexive field notes that captured specific details of the interview (Smith & Sparkes, 2016).

Interview Guide. The interview guide (Appendix C) began with opening questions that served to break the ice between the researcher and participant (Smith & Sparkes, 2016) by asking about the participants' athletic career (e.g., Can you briefly describe your journey to becoming a professional football player?). Following this, key questions were asked to the participant regarding their experiences with group dynamics on the offensive line in professional football. Some key questions included: "With regard to increasing team chemistry on the offensive line, can you explain what an ideal teammate would be like?"; "When you think of the best offensive line coach(es) you have had, can you describe how he interacted with you and how he impacted the cohesiveness of the line?" Furthermore, to elicit more details and overall data collection quality, 'minimal probes' were used by the researcher throughout the interview (e.g., "Can you expand on that?" Rubin & Rubin, 2012; Smith & Sparkes, 2016). Finally, the summary and conclusion sections allowed the participants to provide additional insights and meanings about their experiences if they were not covered in the previous sections.

Data Analysis

Sparkes and Smith (2014) define qualitative data analysis as an "interpretive process of meaning-making that begins at the outset of the investigation" (p. 115). They also noted that it procedurally involves data transcription, data management, data interpretation, and researcher reflexivity regarding those interpretations (Sparkes & Smith, 2014). A thematic analysis was used in this study to analyze and interpret that data in order for the researcher to find the shared meaning participants attributed to their lived experiences (Braun & Clarke, 2019). Thus, the researcher was cognizant about the important role he played in the production of knowledge through the decisions he made in the analytic process (Trainor & Bundon, 2021). As such, the

researcher practiced reflexivity throughout all of the stages of the data analysis, thus engaging in a reflexive thematic analysis (Braun & Clarke, 2019).

The thematic analysis was conducted using the six phases recommended by Braun et al. (2016), which is also supported by proponents of the more newly developed reflexive thematic analysis (Braun & Clarke, 2021). The first phase involved the researcher familiarizing himself with the data and engaging with the data in a critical way. The *familiarization* phase included listening to the virtual interviews and reading the transcripts several times in a curious and questioning way in order to setup the following phase (Braun et al., 2016). The second phase, coding, involved labeling chunks of textual data with a few words or small phrases (e.g., Importance of character) that represented how the participants attributed meaning to their experiences. Then, the third phase, theme development, consisted of constructing themes by clustering codes that shared common patterns in participant experience together. Next, refinement consisted of revising the data to ensure that the codes and themes fit well with the dataset by providing a summary of the data and shaping a first version of the potential patterns of meanings. As such, relationship between the themes were found and organized in a hierarchical manner, thus producing 3 overarching themes within which 8 themes were contained. The fifth phase consisted in *naming* the themes in a way that explained the essence of participant experience to the reader. Finally, the sixth phase, writing up, completed the analytic process by providing a final report of the data, including participant quotes that clearly and compellingly demonstrated the different analytic features of the study (Braun et al., 2016).

Trustworthiness

The quality standards in qualitative research differ a great deal from those in quantitative research. Indeed, concepts such as validity, reliability, and objectivity cannot be used as

standards to measure quality in qualitative research (Sparkes & Smith, 2014). Rather, trustworthiness is deemed the gold standard in qualitative work (Sparkes & Smith, 2014) and is mainly achieved by maintaining coherence between one's philosophical assumptions, methodology, and methods (Poucher et al., 2020; Smith & McGannon, 2018; Tamminen & Poucher, 2020). Following the principles of a constructivist paradigm rooted in ontological relativism and epistemological subjectivism, the current study employed an initial bracketing interview, a critical friend, a reflexive journal, and achieved substantive contribution and width by selecting an elite sample of participants.

Initial Bracketing Interview. It is worth noting that the first author has extensive experience as an offensive line player and coach. Indeed, he competed at the elite level as a player and is currently coaching elite varsity football. Therefore, the first author used bracketing (Smith et al., 2009) to increase the rigor and trustworthiness of the study. However, it is important to note that bracketing did not (and could not) completely eliminate the lead researcher's prior assumptions (Smith et al., 2009). Rather, an initial bracketing interview was used to make the first author aware of some of his preconceptions about the offensive line in football (Prior & Coates, 2020). To do so, a reflexive conversation took place between the lead researcher and the second author, his research supervisor, prior to the data collection. This conversation served as a reflective practice that critically questioned the lead researcher's prior assumptions and was used to adjust the semi-structured interview schedule to eliminate or adjust questions that could have led the participants toward a specific answer (Prior & Coates, 2020).

Critical Friend. This study used a 'critical friend' to enhance rigor and trustworthiness of the data (Smith & McGannon, 2018). Specifically, this approach to rigor includes a process of dialogue between two or more people who share their interpretations of the data, and who offer

critical feedback on those interpretations (Smith & McGannon, 2018). The goal is thus to encourage further reflection, and to open the researchers' up to alternative explanations of the data they are analyzing (Sparkes & Smith, 2014). As it related to the philosophical assumptions of this study, the 'critical friend' aligned with the constructivist paradigm, as it encouraged the co-construction of knowledge between several people (Smith & McGannon, 2018). Specifically, the primary author shared his interpretations with his thesis supervisor who has substantial experience in qualitative research on group dynamics. However, this author did not have direct experience as an offensive line player or coach, although he has 30 years of experience as a coaching science researcher. Therefore, he acted as sounding board to question the lead author's assumptions about the group dynamics on the offensive line (Sparkes & Smith, 2014). As such, by challenging the lead author's thought process and by offering different interpretations, more reflexivity was achieved throughout the research process.

Reflexive Journal. An additional reflexive practice that was used was the reflexive journal that served as a way for the researcher to critically reflect throughout the stages of data collection and analysis (Smith, 2016). Following each interview, the lead researcher made journal entries reflecting on the interview, including about his role as a co-constructor of the knowledge generation process. Moreover, to increase reflexivity throughout the analytical process, the lead researcher made journal entries reflecting about his own pre-conceptions about football and coaching throughout the thematic analysis (Braun & Clarke, 2019). Thus, the entries in the reflexive journal served as a monitor to ensure balance between the dual role of researcher and interpreter (André-Morin et al., 2017).

Substantive Contribution and Width. All the participants were purposively recruited to ensure that an elite sample of professional football players took part in this study (Smith et al.,

2014). Thus, the average professional experience of our group of offensive linemen exceeded the average in the CFL for this position. As such, each participant had playing experience with a variety of teammates, head coaches and offensive line coaches throughout their professional careers. Moreover, the participants were playing on 5 of the 9 teams in the Canadian Football League at the time of the study, ensuring that their recent experiences with group dynamics and coaching included different team cultures and coaches. Furthermore, to allow the readers to interpret the data and the quality of the findings for themselves, multiple quotations were provided throughout the results section (Smith et al., 2014; Smith & Sparkes, 2016). These quotations allowed the reader to obtain a first-hand description of the findings directly from the participants, thus increasing the trustworthiness of the study (Burke, 2016).

Chapter 4 – Results

This chapter presents the results of semi-structured interviews with six professional offensive linemen who are currently playing in the Canadian Football League (CFL). The combined interviews lasted 499 minutes, averaged 83 minutes, and ranged from 78 to 92 minutes. Upon transcription of the interviews, 149 pages of single-spaced text were produced, resulting in a total of 76,268 words. Following the thematic analysis, the data was organized into 39 codes, 8 themes, and three overarching themes that were labelled: *contextual factors*, *coaching importance*, and *creating a cohesive unit* (see Table 1). The following section will offer descriptions and participants' quotes to provide a detailed illustration of the overarching themes. Moreover, pseudonyms (e.g., Randy) will be used throughout this chapter to protect the participants' confidentiality.

Contextual Factors

This overarching theme describes the players' career path along with their perceptions of being a professional gridiron football player in Canada. This section is split into the themes of career path and realities and challenges of professional football.

Career Path. This theme explores the athletes' descriptions of their playing career before becoming professional athletes. Given that they were some of the most gifted athletes on the field throughout their youth, they often played several positions before being advised to transition to the offensive line:

I started when I was about eight years old. I was playing running back, middle linebacker, and a bunch of different positions. I also played tight end. And then I was finally told, "Hey, if you want to keep going and play football more seriously at a higher level, (...) you're a pretty big kid, so you might want to try O-Line." (Trevor)

Although the players had immense athletic potential, they did not necessarily have expectations about playing professional football prior to entering University. Rather, they played because they enjoyed football, and they often developed their skills while playing in University:

Oddly enough, when I came to University, I didn't see myself playing professionally. I thought, "okay, I love playing football. I'm going to University anyways, there's an opportunity for me to go and play." (Julian)

I didn't have the highest expectations about playing professionally going into University.

But then I just kept growing. By the time I became a draft-eligible player, I started playing well and got drafted high. (Ricky)

In fact, most of the athletes only started to think about playing professional football towards the later stages of their University careers:

My third year in college, I kind of honed in on being an offensive lineman. (...) And then towards the end of my career at (name of university), that's when I started to see some CFL interest. Scouts were talking to me, and we went on from there. (Cory)

In sum, prior to playing professional football, most of the athletes played other positions in youth football before transitioning to the offensive line at a more competitive level.

Furthermore, they did not have many expectations regarding a professional football career until they discovered their potential towards the end of their University careers.

Realities and Challenges of Professional Football. This section relates to the unique features of the professional football context and its culture. Compared to University football, several differences emerged for the players when they started playing professionally. For example, players spent less time with their teammates as professional athletes compared to when they played college football, which in turn influenced the team dynamics:

There is more group cohesiveness in college because you're there on campus with each other. (...) Some guys hang out because you're on campus, so you just hang out. As opposed to when I was in (location of professional team), as soon as you leave the facility, everybody's going in their own direction. (Randy)

As a professional athlete, all of the participants alluded to the business element of their career. In fact, Randy described how he feels that professional athletes are treated as commodities:

You have to know that it's a business. You just can't go in there blind thinking this is not a business. You're going to see it. You're going to see "Oh, he should have made it. I thought he was going to make the team." But "Oh, he's an American. We needed a Canadian at that position" or "He's older. A younger guy will be cheaper. We'll pay him cheaper to do the same thing." (Randy)

Unsurprisingly, the players described the team roster as being highly volatile and capable of changing on a weekly basis:

In the pros, you got guys coming in and out non-stop. You usually have your core guys, but even then, what if the guy's a free agent? Is he trying to stick in the area? Is he trying to go somewhere else to get paid? You might not be with him. If he's gone, you got to plug a new guy in. So, I do feel like it's a little more revolving. (Cory)

While roster changes were perceived to be made for the team's financial benefit, the players believed that rapid turnover in personnel had many negative sides to it, such as a lower group cohesion and team success:

I think roster turnover affects the group. At one point, every year it was different, and it's kind of tough to build a chemistry when everyone is changing. I think all the better teams

that you've seen in pro football are teams that have been able to retain the majority of their players. (Trevor)

Obviously, there's always a bit of an adjustment period whenever someone new comes in the group. You always hear "the best lines are the ones that played together the whole year." And it doesn't happen often. It's pretty uncommon that you're able to start the same five guys every single week. (Ricky)

Players also described how a change in the coaching staff or management resulted in certain challenges and stressors, such as adjusting to a new – and sometimes less effective – coaching style:

I've had a lot of different offensive line coaches. That in itself makes it a little bit difficult to build cohesion, because you might not be exactly sure what that coach wants at the beginning of the year. (...) So, you need to learn how to adjust your game to that when you're dealing with the new coach. (Ricky)

So, a new head coach comes in and he has his own group of guys, and he brings those guys along that maybe are just getting their introduction to coaching and are learning. So, you don't always get the best of the best, but you have to understand that whoever's there, you have to respect and give them their opportunity. (Jim)

In sum, the players described the unique context of professional gridiron football. Specifically, they discussed how teams treat players as commodities and the consequent roster turnover, often at the expense of the group's dynamics and team success. Furthermore, the athletes felt that the environment was more stressful at the professional level compared to college, and that group cohesion was often difficult to attain within the former context.

Coaching Importance

The following overarching theme relates to the makeup of a gridiron football coaching staff, and the importance and outcomes of both effective and ineffective coaching practices on the development of the offensive line group. The themes making up this section include coaching staff dynamics, OL coach attributes & behaviours – negative, and OL coach attributes and behaviours – positive.

Coaching Staff Dynamics. This theme delves into the coaching roles and responsibilities between the head coach, offensive coordinator, and offensive line coach. All of the players discussed the hierarchical nature of the coaching staff, with the head coach being at the top of the coaching hierarchy, followed by the offensive coordinator, and then by the offensive line coach. Considering the head coach's positioning at the top of the chain of command, the players felt that it was essential for the head coach to have the abilities to manage and align the entire coaching staff. As such, the head coach's vision would be passed down by the assistant coaches to the players:

I think a head coach's responsibility is to be able to manage the whole team. So, it can't just be, "I'm a head coach, but I'm only an offensive head coach. I'm a head coach, but I'm only a receiver's coach. I'm only a linebacker's coach. I'm only a defensive coach." I think a head coach needs to be able to manage. It's kind of like the pyramid scheme. He's at the top of the pyramid, but he needs to be able to cover or umbrella everyone under him. (Trevor)

If you're asking specifically how it impacts the offensive line culture, I'd say the head coach does to a certain degree for sure. I've had a head coach before where he said, (Team Motto). That trickled down to our offensive line coach and kind of got reinforced

throughout. But it's just kind of those constant messages of how he wants his team to be built that's going to trickle down from him and then kind of through the coaches. (Cory)

As far as the athletes were concerned, the offensive coordinator only indirectly influenced the cohesion on the offensive line. In fact, they perceived the offensive line coach as the buffer between the offensive line players and the offensive coordinator:

The offensive coordinator, for me, rarely has an effect on the offensive line because he will just talk to the offensive line coach, and the offensive line coach would then talk to us. (Randy)

I think we are pretty fortunate that we've always had offensive coordinators that trusted the offensive line to handle their end of the offense, and kind of left the coaching to the offensive line coach. I think that is how I have seen it work the best. (Julian)

Considering this, a high-quality working relationship between the offensive coordinator and the offensive line coach was judged to be critical for offensive line success. In fact, one participant explained how the offensive coordinator's support of the offensive line coach could help the players perceive their positional coach as competent:

I've had a number of coaches that have come in where you hear from other players and it's like, "Oh, yeah. This guy is an absolute nightmare (...)" You know, stuff like that. And then the guy comes in and your offensive coordinator comes up to you like, "This guy is great. He's going to make everybody better." And it builds up that pedestal. So, when he comes in, you're already looking up to him. (Jim)

Despite the importance of the relationship between the above-mentioned coaches, the athletes also described situations in which conflicts arose between coaches. Often times, these conflicts resulted in members of the offensive line buying into the offensive coordinator's vision

by necessity. Consequently, the players described how these conflicts negatively influenced the offensive line's group cohesion, and resulted in them losing trust in their coaches:

Say we have an O-Line coach that is verbal about how upset he is with the offensive coordinator's call. Well, now we're like, "oh, someone's in the wrong." And then you kind of start to question everyone. I feel like when you begin to question which coach is right and which coach is wrong, you can kind of spitball into questioning the culture, their teachings, and everything else. So, I feel like in that sense, conflicts between coaches hurts cohesion. (Cory)

If the offensive coordinator says something about the offensive line coach and kind of makes them seem like they're not aware of everything that's going on, it just sows seeds of distrust. And I think that affects the relationship in that room just because you can't fully trust the guy who's giving you instruction on a day-to-day basis. (Jim)

Overall, the players described the coaching staff hierarchy by discussing how the head coach's message trickled down the coaching chain of command until it reached the players. Furthermore, they explained the importance of a positive relationship between the offensive coordinator and offensive line coach. If these coaches failed to properly align their coaching methods, their disagreements negatively influenced cohesion on the offensive line and led the players to distrust the entire coaching staff, and particularly their positional coach.

OL Coach Attributes & Behaviours – Negative. This theme concerns the undesired behaviours, traits, and personal characteristics of professional offensive line coaches. To begin, the players described certain instances in which the offensive line coach sent conflicting messages to the group from one day to another. In these occasions, players lost trust in their

coach and were uncertain about the coach's expectations, resulting in tension and conflicts on the offensive line:

I feel like you get into grey areas not knowing exactly what to do when the offensive line coach sends conflicting messages. Confusion is never a good thing to have on the offensive line. (Cory)

The players also described that negativity from their positional coach, particularly during games, was an undesirable coaching trait resulting in a loss of respect for their coach:

I've been around situations where you come off the field and the coach is just in your ear tearing into you. And what good does that do? Is that going to make you win the game?

No, it's not. You can be like that in the film review after the game all you want, but not during the game. (Ricky)

Moreover, one of the most negative coaching traits that the players described was closed mindedness. For them, when the offensive line coach made demands without first seeking player input, conflicts tended to arise within the group because some players likely agreed with the coach while others likely disagreed. Consequently, while being overly authoritative might work in the short term, the players felt that it was poor long term coaching strategy:

I think that's something we were missing (...). We had a culture that was more imposed than decided on by the group, and I was kind of at odds with it (...). But for some guys, that approach works. Some guys totally agreed with that culture. (...) But a conflict (...) was that our culture was a little more imposed as opposed to what we all wanted. (Julian) I think the biggest coaching don't for me is the stubborn factor. You can't be stubborn. If you're stubborn, it might work for a little bit. It might work for a few weeks; it might

work for a year. But in the long run, being stubborn is not something that's going to help.

(Trevor)

In sum, the players described how their offensive line coaches sometimes displayed undesirable coaching traits and behaviours that negatively influenced the group. Specifically, the players felt that group cohesion and development was impeded when coaches sent conflicting messages and were negative during games. Furthermore, closed mindedness was a negative coaching trait that the players associated with intra-group conflict on the offensive line.

OL Coach Attributes & Behaviours – Positive. This section conveys the preferred behaviours, traits, and personal characteristics of offensive line coaches. All of the players spoke about offensive line coach's critical role with regards to positively influencing the group's dynamics. For the players, while some coaches were more authoritative and demanding and others were deemed to be more player friendly - both types of coaches could be effective:

I feel like the best offensive line coaches for offensive lines are ones that can bring something. There are two different types of coaches. There are guys that will grind you and create bonds between offensive linemen because of the struggles you go through in practice. And then there are also guys that just let the players be players. They provide a little bit of incentive for guys to get better, some technique and stuff like that while letting the guys be the guys. (Jim)

In fact, Jim explained that both types of coaching attitudes could positively influence the group's cohesion in their own way:

I mean, when you're not exhausted, you have a little more to give. But when you're tired and you learn how to fight through things, I think that builds that cohesion as well. So,

I'm not saying one's better than the other. They both have their merits. But there are definitely two different coaching styles that lead to some form of cohesion. (Jim)

To choose the leadership style that would most positively influence the group's dynamics, the best offensive line coaches considered many factors, such as the group's identity. For example, while a coach might need to be directive with a group of young players, Julian did not believe this was necessary with a veteran group:

I think that's a good approach. In lines that have a veteran group, you have a group of guys that can kind of all look after themselves, and they don't necessarily need to be steered. You just kind of got to put gas in the car and let it go. I think that was the role of coaching there. (Julian)

Regardless of coaching style, the players explained that justifying the reasoning behind decisions and finding creative ways to convey their message as desirable coaching behaviours:

My O-Line coach would go through the film, and he would pick out a couple of plays to demonstrate what he was really looking for. His element was more so finding examples of what he wanted and showing it to us. As a coach, he was more so "after I show it to you and then you display it on film, we'll celebrate that!" (Julian)

Despite the need for clear expectations, the best offensive line coaches found balance in their coaching approach. Indeed, they implemented rules that clarified their coaching expectations and remained open to change their ways when it better suited the group:

For an offensive line coach, balance is the biggest thing. You have to be able to have a balance of not being a pushover. Be a players' coach and not be a pushover. You have to be able to implement your rules. But at the same time, if you're an authoritative kind of

guy, then you also have to be able to recognize when it's detrimental to that group and you have to be able to learn as you go. (Trevor)

Furthermore, considering that they had developed the competencies to be high performing professionals, the players felt that they had valid opinions about offensive line play and group functioning. As such, they described the importance of having an offensive line coach who was open to having conversations and valued their opinions:

I think the best coaches that I've had have just been ones that are willing to have that conversation with you and be like "how do you see this? Okay, here's how I see it. Okay, that makes sense. You know what? I actually like your way." Or "okay, I like my way better." They recognize when a player is doing something well, even if it's something that they don't necessarily teach. And they can either adapt their teaching or kind of let that person have a little bit of freedom in terms of what they do. The best coaches recognize if what a player is doing is going to bring value to the team or if it's not. If it's not, correct it. If it is, let them do their thing or support it. (Ricky)

Additionally, the players described how the most effective offensive line coaches get to know their players on a personal level. In fact, many professional players live far away from their family and friends, and consequently go through personal challenges. Therefore, building relationships with players and being compassionate about players' off-field struggles were described as desirable coaching behaviours that improved overall group climate:

The best coaches build relationships with us by talking to us. Having heart-to-heart conversations. I mean, there are certain things that go through guys' minds every day, and you don't know what it is. Some guys don't want to hold it in. Some guys hold it in.

Just knowing your players, knowing when something might be wrong. It just all comes down to, like, showing that you care, right? (Randy)

As an offensive line coach, do show compassion and be human. You don't have to be hard, and you don't have to be a particular certain way. Be yourself and show compassion when someone's going through something, because I think showing compassion and being human garners a lot of respect in this day and age. (Jim)

In essence, the players described that both authoritative and players' coaches could have a positive influence on the offensive line dynamics in their own way. Moreover, they mentioned several favorable coaching attributes and behaviours, such as setting clear expectations, being adaptable based on individual and group needs, listening to players and valuing their input, and getting to know the professional athletes on a personal level. For the players, all of these coaching behaviours positively influenced the group dynamics on the offensive line.

Creating a Cohesive Unit

This overarching theme explores the environment, roles, and interpersonal processes that shape the development and cohesion of the offensive line. The themes comprised in this section are a team within the team, the development of a unit, and the importance of veteran athlete leadership.

A Team Within the Team. This section describes the distinctiveness of the offensive line compared to other positions in football. The participants explained that members on the best lines tend to be bonded by their mutual enjoyment of doing the selfless work that underpins team success:

Everyone says it starts in the trenches and that's how the game progresses. And if you win in the trenches, your team is most likely going to win. So, we don't play for glory on the

offensive line. We play for our teammates; we play for the guys next to us. And it's a special bond that I don't think is the same at other positions. (Trevor)

Extending this, as opposed to other positions in which people could have individual success regardless of circumstances, the players described that the offensive line's success depended on every single one of its members:

In other positions, like the ones on defense, I do think it's a little more individualized. I understand it's still a whole team, but you have certain players that are key. On the offensive line, you really do have to be a cohesive unit to really function well. (Cory) On the O-Line, you need five guys to have good chemistry. But not just those five guys, you have to have the number six guy who can fit in without it being an issue. You have to have the number seven guy who can fit in without it being an issue. You have to be able to have the guy who's on practice roster that's able to jump up and fit right in, too. (Trevor)

In sum, the players described that the offensive line was a unique group on the team that operated as its own entity and depended on everyone working together in the same direction.

The Development of a Unit. This theme relates to the interpersonal processes that facilitate or impede cohesion on the offensive line. All the athletes alluded to the importance of spending time with their teammates:

At the end of the day, I think hanging out outside of the facilities just creates more care about the players you play with. You care more about the player, about his story, where he's from, and what his dreams and aspirations are. (Randy)

Building friendships off the field is important because, I think, the better you get along with someone, the more that person wants to work with you. The more they would want

to put in the time with you to study an opponent outside of the time slots of your organized meetings. (Ricky)

Additionally, the players described a process by which they achieved non-verbal communication on the field. Specifically, group members spent time communicating about preferred ways of operating with regards to certain situations they could encounter on the field. With the reiteration of these situations over time, the players learned what to expect from each other, resulting in cohesive group play without the need for verbal communication. Considering the speed at which a football play develops, the players explained that non-verbal communication was an essential component of offensive line cohesion and success:

So, we kind of developed the chemistry of we'd make a mistake, and we'd look at each other and be like, "did you see this?" or "did you see that?" And it would be like, "Okay. Yeah." We would talk about it. And then later on in the game, we see something before even the snap of the ball, and you just look at each other and you know exactly what you're talking about. (Trevor)

I've been with veteran guys, and we don't have to say what we're doing. We just know, So that's past the verbal communication. Just knowing, "Okay, I know where this guy's going to be." (Randy)

To conclude, the players explained that, while good coaching could never overcome poor character, good character could overcome poor coaching to form a cohesive group. Furthermore, the participants described the importance of spending time and communicating with their teammates as much as possible. Furthermore, the athletes explained that when a similar group remained together for a long time, they gained the ability to non-verbally communicate with each other, thus resulting in better cohesion and performance on the offensive line.

The Importance of Veteran Athlete Leadership. The section describes veteran offensive linemen's instrumental role in developing the rookies and in creating the group's identity. Naturally, all of the participants had once been young professional gridiron football players. To them, their adaptation to the professional environment was largely attributed to the positive influence veteran players had on them:

As a young player, I had a lot of one-on-one conversations with (name of player). I always talk highly of that guy because he really turned my career out. Just watching him. I would always observe the older guys because they were ahead of me. I would watch them and see what I could steal from them to be better. (Randy)

In part, as first-year professional players, the participants had learned the required working habits to become successful offensive linemen from the experienced players in their group:

So, there are guys that'd be walking in the door at 8:45 or 8:50, go through our meetings, go through practice, grab their lunch, and they'd be gone after. Whereas the more successful veterans would stick around. These were the guys I kind of started hanging out with. They'd be getting a workout in, they'd be watching a lot of film, and they'd be doing all this different study. They'd go through practice film together. For me, I feel like those things really highlighted what needed to be done to become a professional, to become better. (Cory)

As such, the players were appreciative for the help they had received and becoming mentors as veterans was a way to give back to the rookies. Also, considering that all members of the offensive line need to perform in order for the group to have success, the athletes felt like it was in everyone's best interest for veterans to become leaders:

I spend a little more time with the young guys on the field or whatever. And that all is kind of paying it back because of the guys that brought me into the league and helped me out. I try and pay it back whenever I can. I'll also spend extra time with the younger players in the film room. I'll spend time with them and show them what to look for. (Jim) I always feel like giving back to the younger group and trying to build them up. And especially, at the end of the day, you're trying to win a Championship. It is what it is. You're going to have veterans; you're going to have rookies. If the veterans don't bring up the rookies to play at a higher level, you're not going to be as successful. (Cory)

Furthermore, the participants explained that rookie players were less likely to have individual conversations with the offensive line coach compared to experienced players.

Therefore, the veteran offensive linemen served as a buffer between the offensive line coach and the rookies. On the one hand, the players explained that veterans could help the young players maintain their morale by helping them better understand the coach's approach:

The CFL is a very veteran-driven league, and typically the vets have it a little bit easier. We've been through it, so coaches trust us a bit more. The rookies will kind of get the tougher coaching. So, if a rookie is getting chewed a little too hard, I can see it. I always try to do something when I see a rookie's morale plummeting because the coach is on him. Pick them back up a little. (Cory)

On the other hand, the athletes also described how veteran players served as a conduit through which the offensive line coach could better clarify his expectations with the rookies:

The coaches have their guys. For example, coach will tell me, "Hey, I need you to get him on, man. Get on him. I need you to lead more." So, I'll pull a guy to the side and say, "I need you to do this." (Randy)

As a result, the athletes explained that veteran athlete leadership resulted in stronger group cohesion and performance. In fact, by serving as exemplar role models for the younger players, the participants described how veteran offensive line leaders helped create buy-in from all group members. Consequently, group members spent more time together to improve their collective abilities:

On the cohesive offensive lines that I have been a part of, the veteran players really set the tone of what they wanted and what they were expecting. When you get the veteran crew all working together, cohesiveness forms from that. (Cory)

You think about how having older players invest extra time builds the camaraderie and the kind of kinship between offensive linemen. You have this guy that's 38 years old and has two kids at home and is willing to give up his time to make you better. So, you're going to commit a little bit more of your days and whatnot and be more intentional with everything you do when you're at the facility. (Jim)

Overall, in order to form a cohesive offensive line, the participants described the necessity of strong veteran athlete leadership. To begin, all of the athletes alluded to learning from veterans when they were young and wanting to give back to the rookies by serving as mentors. Moreover, the participants explained that veteran leaders are an important line of communication between the rookies and the offensive line coach. Lastly, veteran athlete leaders were described as the main decision makers with regards to establishing group norms, and that strong leadership resulted in better group cohesion and performance on the offensive line.

Table 1 – Codes, themes, and overarching themes from data analysis

CODES	THEMES	OVERARCHING THEMES
1. Pre- CFL Career (12)	1) <u>Career Path</u> (12): Description of playing career before becoming a professional athlete.	
 Business of football (20) Roster turnover (19) College vs pro (17) 	2) Realities & Challenges of Professional Football (56): The unique features of the professional football context and culture.	1) Contextual Factors (68): Each player's career path and perceptions of being a professional gridiron football athlete.
 Coaching hierarchy (27) Conflict among coaches (17) 	3) <u>Coaching Staff Dynamics</u> (44): Coaching roles and responsibilities between the head coach, offensive coordinator, and offensive line coach.	
 Coach closed-mindedness (15) Poor coaching (9) Coach criticism (9) OLC distrust (9) Coach negativity (6) 	4) OL Coach Attributes & Behaviours – Negative (48): Undesired behaviours, traits, and personal characteristics of offensive line coaches.	2) Coaching Importance (205): The makeup of the coaching staff, and the importance and outcomes of both effective and ineffective coaching practices on the development of the group.
 OLC importance (32) Coach openness (29) Coach adaptability (23) OLC relationship building (14) Coach technical feedback (11) Importance of fun (4) 	5) OL Coach Attributes & Behaviours – Positive (113): Preferred behaviours, traits, and personal characteristics of offensive line coaches.	

1. Working together (18) 2. Trusting one another (16) 3. OL uniqueness (11) 6) A Team within the Team (66): 4. OL rookie integration (9) The distinctiveness of the offensive 5. OL gratification (6) line compared to other positions in 6. OL camaraderie (3) football. 7. OL cliques (3) 1. Spending time together (26) 2. Player communication verbal (16)3. Lines of communication (11) 3) Creating a Cohesive Unit 4. Player buy-in (11) 7) The Development of a Unit (105): (226): The environment, roles, 5. Player communication nonand interpersonal processes The interpersonal processes that verbal (10) facilitate or impede cohesion on the that shape the development and cohesion of the offensive 6. Tension among players (8) offensive line. 7. Importance of character (7) line. 8. Adapting to others (5) 9. Playing poorly (5) 10. Conflict resolution (4) 11. OL player confidence (2) 1. Veteran player importance (24) 8) The Importance of Veteran 2. Teaching younger players (16) Athlete Leadership (55): Veteran 3. Being mentored (8) offensive linemen's instrumental role 4. Learning from veterans (7) in developing the rookies and in creating the group's identity.

Chapter 5 - Discussion

The purpose of this qualitative study was to explore professional athletes' perspectives of the group dynamics on the offensive line in gridiron football, including the role of the offensive line coach. Results revealed that the offensive line was a unique group in gridiron football that operated as its own identity and depended on everyone working together in the same direction. Therefore, group success and cohesion were often impeded by frequent personnel turnover (coach and player). Furthermore, the findings suggested that while the best assistant coaches influenced their subgroup's identity, they also let the players shape it, often by means of interplayer interactions and strong athlete leadership. Overall, these results enhance our understanding of effective assistant coaching and provide professional sports teams with strategies about managing the group's environment, structure (i.e., roles), and processes in order to improve group dynamics within their various positional subgroups. As such, the following section will be divided into three sections: group environment, group structure, and group processes. The first relates to the uniqueness of the offensive line and how it influences group cohesion and functioning within this subgroup. The second section will address coach and athlete roles, and their influence on the group's dynamics. Finally, the third part will discuss athletes' perceptions of the processes leading to increased teamwork behaviours.

Group Environment

The players believed having all group members working in the same direction was necessary on the offensive line. Seemingly more than some other positions in gridiron football, individual success on the offensive line was highly dependent on the other group members.

Specifically, the players believed that there could be certain key individuals in other positional groups that largely contributed to the group's success, which did not seem to be the case on the

offensive line. As such, perceptions of interdependence on the offensive line related to the importance the players attributed to group cohesion. This finding supports prior claims that sports requiring the highest levels of reciprocal interdependence also require the highest perceptions of cohesion to succeed (Cotterill, 2012; Dobrijević et al., 2020; Pescosolido & Saavedra, 2012). While previous literature has proposed that gridiron football requires moderate levels of interdependence (Feltz et al., 2007), the current findings suggest that the offensive line is a highly interdependent subgroup within the larger team, thus rendering perceptions of cohesion important at this position. From a practical perspective, the present results suggest that it is useful for professional gridiron football coaches to positively influence perceptions of cohesion on the offensive line – for example, by implementing certain team building strategies (see Bloom et al., 2003) – considering the seemingly unique interdependent nature of the position. To that end, the findings provide evidence that different positional groups on a gridiron football team require different levels of interdependence. From a theoretical standpoint, this last point suggests that the importance of group cohesion likely varies (Cotterill, 2012; Dobrijević et al., 2020; Pescosolido & Saavedra, 2012) across positional groups on a gridiron football team. As such, future research could examine the perspectives of other positional group members on a gridiron football team to explore how their perceptions of cohesion are influenced by the unique demands of their position.

Considering the on-field demands of playing offensive line (i.e., communication, working together), the athletes believed that strong group cohesion improved group functioning and performance of this subgroup. This finding aligns with the literature exploring the relationship between cohesion and performance in sport (Carron, Bray, et al., 2002; Carron, Colman, et al., 2002; Din et al., 2015; Filho et al., 2014; Greenleaf et al., 2001). For example, Carron, Bray, et

al. (2002) explored the cohesion-performance relationship on Canadian intercollegiate basketball and club soccer teams and found a strong relationship between cohesion and winning percentage. Specific to cohesion and performance in professional sport teams, Heuzé et al. (2006) found that individual performance led to increased perceptions of cohesion, but that the relationship was not reciprocal. The researchers attributed their findings to the fact that players with better individual statistics often received more playing time, thus increasing their individual perceptions of cohesion. The current findings increase our understanding of this body of literature (Carron, Bray, et al., 2002; Carron, Colman, et al., 2002; Din et al., 2015; Filho et al., 2014; Greenleaf et al., 2001) by suggesting that, while cohesion might not be related to individual performance (Heuzé et al., 2006), increased group cohesion in professional sport teams could result in superior performance when performance is defined as a group outcome. However, the generalizability of the present finding is limited, considering that measures of cohesion and performance were not assessed. Therefore, future research should quantitatively measure group cohesion and group performance in professional sport teams to better understand how both variables are related in this context. Specifically, in professional gridiron football, it would be interesting to define parameters for positional group success, including for the offensive line, and measure the importance of cohesion across these various subgroups to see if there are any discrepancies in relation to individual subgroup and overall team performances.

Results from the current study revealed players believed that several unique contextual factors of the professional gridiron football environment, such as being treated as commodities and rapid personnel turnover, created a more stressful environment compared to other levels of competition and influenced team cohesion. To that end, the players described that rapid player and coach turnover was an impediment to cohesion at the professional level, as players often

needed to adjust to new teammates and/or coaches quite frequently. This finding is consistent with the literature on role perceptions in sport teams (Beauchamp et al., 2002; Beauchamp et al., 2003; Bray et al., 2005; Eys, Carron, Beauchamp, et al., 2003; Eys, Carron, Bray, et al., 2003; Eys et al., 2020). For example, Eys, Carron, Bray et al. (2003) found that lower perceived role ambiguity in University soccer players was associated with higher athlete satisfaction. Moreover, when exploring the nature of role ambiguity in sport teams on a sample of 504 high-school, club, and University athletes, Eys, Carron, Beauchamp, et al. (2003) found that perceptions of role ambiguity decreased from early to late in the competitive season. To that end, the current study suggests that in the professional sports context, in which the selling and trading of players (Elberse & Dye, 2012) and coaches losing their jobs due to poor team performances (Mallett & Lara-Bercial, 2016) is a common occurrence, role ambiguity is likely a negative influence of the team dynamics. Specifically, rapid personnel turnover and the resulting uncertainty regarding roles likely has a negative influence on athlete satisfaction (Eys, Carron, Bray, et al., 2003) and performance (Beauchamp et al., 2002) in professional offensive lines. As such, professional gridiron football teams can use this information to enhance organizational alignment and performance on their team. Specifically, general managers could attempt to create an environment in which there is enough coach and player continuity for role clarity to emerge throughout the competitive season (Eys, Carron, Beauchamp, et al., 2003).

Group Structure

The participants described that the offensive coordinator – who is second in command in the coaching hierarchy – had a lesser influence on the offensive line group satisfaction compared to the offensive line coach. Specifically, the participants described that they often preferred interacting with their offensive line coach who served as a buffer between them and the offensive

coordinator. Therefore, the current study extends the literature regarding assistant coaching responsibilities in elite gridiron football (Rathwell et al., 2014; Sinotte et al., 2015). To that end, previous studies examining Canadian University head coach and coordinators' perceptions of assistant coaching in gridiron football revealed that one of the coordinator's important roles was to create strong relationships with the student-athletes (Rathwell et al., 2014; Sinotte et al., 2015). The current finding confirmed that assistant coaches are important in creating relationships with professional gridiron football athletes, but it differs from the two previous studies on assistant football coaching in that it suggests that it is not the offensive coordinator, but the offensive line coach who is mainly responsible for connecting with the offensive line players in a professional context. The differences in the findings might be attributable to the fact that professional gridiron football organizations undoubtedly employ more full-time coaches than Canadian University football teams. As a result, positional coaches in professional football can more consistently interact with the players in their positional group compared to University positional coaches. Another contextual reason for the current finding could relate to the unique nature of the offensive line. In fact, the offensive line seems to be a subgroup that somewhat operates as its own entity within the larger football team. While this might not be the case with other positional groups, this uniqueness could be a factor that facilitates the closeness between the offensive line players and coach (Martin et al., 2015). Therefore, it would be interesting for future research to explore other positional groups in professional gridiron football to investigate their group dynamics, including the roles of the coordinator, positional coach, and players.

From a practical standpoint, considering that professional (i.e., sport-specific knowledge) and interpersonal (i.e., the ability to interact with others) coaching knowledge are both critical components of effective coaching (Côté & Gilbert, 2009), the current findings suggest that a

non-hierarchical coaching relationship (Hodge et al., 2014; Kerr, 2013) between the offensive coordinator and the offensive line coach could benefit offensive line group dynamics in professional gridiron football teams. Specifically, while tactical decisions (professional knowledge) are likely an important coaching role for the offensive coordinator, the offensive line coach seems to have the equally important role of interacting and building relationships with the offensive line players (interpersonal knowledge). Therefore, offensive coordinators and offensive line coaches in professional gridiron football teams could separate coaching roles as such, and perceive their relationship in a non-hierarchical way (Hodge et al., 2014; Kerr, 2013). As a result, their collaborative work would likely be an effective way to improve certain athlete outcomes (e.g., confidence, competence, connection, character; Côté & Gilbert, 2009) on professional offensive lines.

The results revealed the group of veteran athletes on the offensive line had an important role to play in influencing group cohesion on the offensive line, as they served as an important line of communication between the rookie players and the offensive line coach. These findings align with the literature about the critical role athlete leaders fulfill in shaping the group's identity and positively influencing its cohesion in elite team sports (Bergeles & Hatziharistos, 2003; Bucci et al., 2012; Dupuis et al., 2006; Heelis et al., 2020; Heuzé et al., 2006; Price et al., 2013; Rees et al., 2015; Steffens et al., 2014; Vincer & Loughead, 2010). However, considering that leadership is highly dependent on the surrounding context (Cotterill & Fransen, 2016), the current study is unique as it provides professional offensive line players' perspectives about leadership roles in their subgroup, including possible motivations to become leaders.

Particularly, it is interesting to consider the interdependence of offensive line play and the fact that players could be motivated by individualistic goals, such as making money, when reflecting

on possible reasons to fulfill a leadership role. In fact, the players described that individual success on the offensive line was only possible if the group succeeded, and that group success depended on veterans helping the rookies play at a higher level. As such, a veteran player who is looking to sign a new lucrative contract by demonstrating his qualities as a player likely depends on rookie performances to achieve his objective. Therefore, while coaches' relationships with veteran players is likely a key reason why these players take on leadership roles in a University context (Bucci et al., 2012; Dupuis et al., 2006; Heelis et al., 2020), it is possible that professional offensive line players' own individualistic aspirations (i.e., making money) contribute more heavily to their willingness to lead the group. Related to this, while taking on a leadership role might be useful for a player looking to sign a new contract at the end of the competitive season, other veterans at the beginning of a new multi-year contract might be more interested in protecting their position as a starting player. As such, it would be interesting for future research to examine how professional athletes in highly interdependent sports, such as the offensive line in football, fulfill specific leadership roles based on the status of their current contract. In other words, future investigations could examine how professional athletes' individualistic aspirations change throughout their contracts, and how these changes influence their interactions with younger players.

Group Processes

While the athletes described necessary leadership roles that must be fulfilled by veteran players, they also alluded to specific leadership behaviours that improved overall team functioning and success. Interestingly, all the participants in the current study felt that they had learned how to become successful offensive linemen early in their careers from a core group of veteran players. As such, this finding supports existing theory on athlete leadership in sports that

suggests that leadership behaviours, including peer mentoring, both improves group functioning and are shared throughout the group (Cope et al., 2011; Cotterill & Fransen, 2016; Fransen et al., 2014; Kim et al., 2020). Furthermore, the players spoke about their willingness to serve as mentors to young players later in their careers because of the mentoring they received when they were young, which aligns with literature on peer mentoring in sports (Hoffmann & Loughead, 2016a, 2016b; Hoffmann et al., 2017). However, the athletes only mentioned mentoring relationship within the offensive line group, which seems to support that peer mentors are effective because their mentees see them as similar to themselves (Petosa & Smith, 2014). While peer-to-peer mentoring has been considered beneficial for team functioning (Cope et al., 2011), prior studies mainly explored individual outcomes for peer-mentored mentees (Hoffmann & Loughead, 2016a, 2016b; Hoffmann et al., 2017). The current results thus extend our understanding of peer mentoring by demonstrating important group outcomes, including for mentors, related to this relationship. For example, veterans on the offensive line helped the younger players learn the necessary working habits to be successful professional athletes, ultimately resulting in better group performances on the offensive line. Then, considering the players perceived the offensive line's performance as having a major influence on overall team outcomes, such as winning games, engaging in peer-to-peer mentoring on the offensive line was perceived as a way veteran players helped the team win championships. Considering that professional sport team owners attempt to maximize team revenue by any means necessary, including on-field winning (Bradbury, 2019), this finding has significant practical implications for members of professional gridiron football organizations, such as general managers, coaches, and players. To that end, general managers looking to improve their offensive line and their team's on-field success can consider the quality of the peer-to-peer relationships within the

offensive line group before making roster decisions (i.e., trades) at the position. For example, if the offensive line group is not performing at a necessary level to support team success, facilitating the development of peer-to-peer mentoring relationships in the subgroup could be a coaching strategy used before the general manager determines that the lack of success relates to talent on the offensive line and resorts to trading, selling, or buying players. Consequently, this strategy could help improve individual outcomes for young and veteran offensive line players, along with improve group outcomes for the offensive line and team by providing offensive line athletes with enough time to develop cohesion by interacting with each other, both on and off the field of play.

Finally, the current results revealed that players invested time with their subgroup members as a way to enhance team cohesion. In fact, the athletes described that they spend a significant amount of time together at the team training facilities after their organized team activities (i.e., gym, film sessions). Moreover, the participants explained that it was also important to socialize and spend time with their teammates outside of the facilities. In other words, the athletes invested time developing cohesion on the offensive line and seemed to have both task and socially oriented motivations when doing so, which aligns with the theory of team cohesion (Carron et al., 1985; Carron et al., 1998; Loughead & Bloom, 2013). On the one hand, considering that winning at all costs attitudes can be adopted by members of professional sport organizations (Bennie & O'Connor, 2010), it is unsurprising that professional athletes were motivated to increase coordination towards a group goal (i.e., task cohesion), considering that it seems to be more significantly related to sport performance than social cohesion (see Carron, Colman, et al., 2002; Filho et al., 2014). On the other hand, considering that social cohesion is not about task objectives but rather refers to the maintenance of social relationships among team

members (Carron et al., 1985; Carron et al., 1998; Loughead & Bloom, 2013), it is interesting that the athletes in the current study valued engaging in social activities with members of their subgroup. To that end, the athletes explained that they felt bonding together on a personal level with their teammates helped improve their working relationships, making them more likely to engage in teamwork behaviours, such as communication, cooperation, and coordination (McEwan & Beauchamp, 2014). Theoretically, this finding extends our understanding of the conceptualization of cohesion (Carron et al, 1985) by suggesting that social cohesion on professional offensive lines relates to more than the players' willingness to engage in social activities to maintain social relationships with their teammates. Rather, it seems that players are willing to engage in such activities because it serves as a means of improving on-field outcomes. In other words, developing social cohesion on a professional offensive line seems to have taskoriented objectives as an underpinning motivation. From a practical perspective, professional gridiron football organizations can use this information, as it shows that social bonding on the offensive line is nevertheless valuable for on-field outcomes. To that end, teams can design their activities to ensure that the offensive line players spend time together outside of organized team meetings and practices. For example, interactions amongst offensive line players could be facilitated by placing them close together in the locker room and as roommates during their hotel stays for road games, thus increasing the likelihood of them grouping together due to physical proximity (Martin et al., 2015). Furthermore, when building the team, a general manager could facilitate social interactions on the offensive line by considering the number of social leaders (see Fransen et al., 2014) in the group and ensuring that there are enough to organize social activities for the offensive line. Finally, professional offensive line coaches and players can use this information as it demonstrates that there is inherent value in organizing social activities (e.g.,

group dinners) regarding group functioning on professional offensive lines, such as improved teamwork behaviours and task cohesion.

Chapter 6 – Summary

While previous research has investigated how head coaches fostered cohesion in performance coaching contexts, research has yet to specifically delve into the roles of the assistant coach regarding group dynamics, particularly from the athletes' perspective. In some team sports, like gridiron football, research has suggested that assistant coaches interact more often with the athletes than the head coach (Rathwell et al., 2014; Sinotte et al., 2015). Thus, the purpose of this study was to explore professional athletes' perspectives of the group dynamics on the offensive line in gridiron football, including the role of the assistant (i.e., offensive line) coach.

Upon receiving approval from the McGill Research Ethics Board, six experienced professional offensive line players from the Canadian Football League (CFL) were recruited to participate in the study. On average, the participants had 7.3 years of playing experience, far exceeding the average career length for professional gridiron football players. Participants were recruited via email or social media to participate in one virtual semi-structured interview based on an interview guide constructed by the research team. Interviews were conducted virtually by the primary researcher, ranged from 78 to 91 minutes, and were video recorded and transcribed verbatim for data analysis. A thematic analysis was used to analyze and interpret that data in order for the researcher to find the shared meanings that participants attributed to their lived experiences (Braun & Clarke, 2019). Specifically, the data was organized into 39 codes, 8 themes, and 3 overarching themes.

This study revealed three overarching themes that were called: *contextual factors*, *coaching importance*, and *creating a cohesive unit*. *Contextual factors* described the players' career path along with their perceptions of being a professional gridiron football player in

Canada. *Coaching importance* related to the makeup of a gridiron football coaching staff, and the importance and outcomes of both effective and ineffective coaching practices on the development of the offensive line group. Finally, *creating a cohesive unit* explored the environment, roles, and interpersonal processes that shaped the development and cohesion of the offensive line. In sum, by providing in depth and firsthand qualitative accounts of professional offensive line players' lived experiences, results from the current study enhance our understanding of the uniqueness of group dynamics in professional sports along with the assistant coach's influence on team cohesion.

Conclusions

Contextual Factors

- Compared to University football, the professional sports environment presented more stressors, including a roster that changed frequently due to financial considerations and/or players being treated as commodities.
- High roster turnover at the professional level often impacted team dynamics and success.
- High group cohesion was more difficult to attain at the professional level compared to other contexts, such as University sport.

Coaching Importance

- Gridiron football coaching staffs consist of many coaches that have different roles, including the offensive coordinator and offensive line coach. While the offensive coordinator is responsible for the offensive group's overall performance, the offensive line coach is responsible for the offensive line subgroup's optimal functioning.
- A positive relationship between the offensive coordinator and offensive line coach was
 described as critical for offensive line functioning, as disagreements between the two led
 players to distrust their offensive line coach.

Assistant coaching attributes and behaviours that negatively influenced cohesion on the
offensive line included closed-mindedness, sending conflicting messages to the group,
and negativity, particularly during games.

Assistant coaching attributes and behaviours that positively influenced cohesion on the
offensive line included setting clear expectations, being adaptable, valuing player input,
and relating to players on a personal level.

Creating a Cohesive Unit

- The offensive line was a unique group on the team that operated as its own entity and largely depended on everyone working together.
- While good coaching could rarely overcome a group of players with poor character, a group with good character could often overcome poor coaching to form a cohesive group.
- Spending time and communicating with teammates as much as possible was considered important to enhancing team cohesion.
- There was value in remaining together for a long time, such as improving non-verbal communication, resulting in better cohesion and performance.
- Veteran athlete leaders were described as important with regards to establishing group norms, and that strong leadership resulted in better group cohesion and performance on the offensive line.
- Veteran leaders are an important line of communication between the rookies and the offensive line coach.

Practical Implications

The current study is among the first to provide a qualitative account of athletes' perceptions of the group dynamics on professional sports teams. The results provide an in-depth

description of the factors affecting group cohesion in the professional sport setting. Examples include the importance of veteran athlete leadership to ensure continuity and group functioning. Moreover, the findings provide a comprehensive understanding of how the behaviours of assistant coaches can either positively or negatively influence their subgroup's dynamics. The present study is of interest to all members of professional sport organizations, including general managers, head coaches, assistant coaches, support staffs, and athletes.

These results are useful for the general managers of professional gridiron football teams in charge of building successful teams. This study demonstrated that professional gridiron football players perceived several contextual factors as impediments to improving team cohesion, such as being perceived as commodities by management and the consequent high roster turnover. While these roster decisions were understood to be related to team finances (i.e., trading a high salary for a lower salary), the players believed that the decisions resulted in lower levels of group cohesion. Considering that the players perceived the offensive line as its own entity in which cohesion was critical for optimal group functioning and performance, general managers seeking to build successful offensive lines should consider drafting high character players, avoiding frequent roster turnovers, and organizing as many team activities as possible (i.e., training camp, daily schedule) so that players can spend a lot of time together.

Furthermore, this study described important coaching factors that positively and negatively influenced cohesion on the offensive line in professional gridiron football. For example, while open-mindedness, adaptability, and building relationships with players were described as assistant coaching attributes that positively influenced cohesion, the athletes also described other assistant coaching factors that impeded cohesion, such as negativity, inconsistent behaviour, and criticism. This information is useful for professional head coaches during their

hiring process, as they can look for these attributes when hiring their offensive line coach. It is also useful information for professional offensive line coaches looking to build a highly cohesive and successful group. Specifically, new professional coaches coming from another context, such as University football, can use this information to understand that they should respect professional players' acquired knowledge and consider their opinions before making coaching decisions.

Moreover, this study demonstrated the importance of maintaining a high-quality working relationship between the offensive coordinator and the offensive line coach. In fact, the participants explained that a good working relationship between the offensive line coach and the offensive coordinator was essential to achieving cohesion on the offensive line. Any perceived disagreements between the two coaches often led the players to lose trust in the entire coaching staff, and particularly their offensive line coach. Offensive coordinators and offensive line coaches can use this information to ensure that they take the time to communicate preferred coaching strategies. As such, by aligning themselves together and presenting a united front, the players will trust their coaching staff, and greater cohesion and performance can be achieved. Also, any player who perceives disagreements between their positional coach and coordinator can make use of this information to avoid excessive drops in group cohesion. For example, a player can decide to go speak to his coaches in private about their perceived disagreement before it begins to negatively affect the entire group.

Finally, this study shed light on the importance of veteran athlete leadership. Indeed, the findings demonstrated that veteran athlete leaders helped to shape the offensive line's group identity, served as a buffer between the offensive line coach and the younger players, and acted as mentors for rookie players looking to adapt to the professional context. This information is of

use to general managers, as it adds value to having veteran players on the team (i.e., mentoring, communication) who can contribute to enhancing team cohesion. Coaches can also use this knowledge to promote veteran athlete leadership by, for example, creating mentorship programs in which incoming rookies are paired with experienced players who will advise them. To that end, this information is significant for veteran players as it demonstrates that being a mentor for rookies is in and of itself tremendously valuable to the team. Conversely, young players entering the Canadian Football League can use this information to actively seek player mentors who will help them get acclimated to a new and more stressful sports context (i.e., professional sports).

Limitations and Recommendations

The purpose of this study was to explore professional athletes' perspectives of the group dynamics on the offensive line in gridiron football, including the role of the offensive line coach. While this study investigated professional athletes' viewpoints about group dynamics in an under studied context (i.e., professional sports), limitations existed. In the future, it would be interesting to repeat this study from the perspective of professional football assistant coaches, as they might have very different interpretations than players about group dynamics, including but not limited to their views about athletes, head coaches, and coordinators. Moreover, future research could examine the head coach's perspective about creating a cohesive team at the professional level. Additionally, while the players described how certain decisions made by management, such as treating players as commodities and making rapid roster changes, negatively influenced the group's climate and functioning, this study did not address the general managers' perspectives on this subject. As such, future research could delve into professional general managers' perspectives about group dynamics in professional sports, and the challenges

they face regarding building cohesive teams through player continuity (i.e., salary caps, free agency).

As a result of the sample size (N=6) and purposeful selection of the participants, these results may only be generalized to professional gridiron football offensive line players in the CFL. As such, future studies might want to study other positional groups in football to explore if any differences emerge. Furthermore, this study was conducted from the perspective of professional players who depend on their salary to make a living. Therefore, other studies might want to examine the athletes' perspective at other levels of competition, such as University gridiron football, in which the athletes deal with different kinds of stressors. While this study examined professional Canadian gridiron football players, it would be interesting to replicate the study in the National American Football League in the United States, where there is significantly more money and media attention. Moreover, research can examine preferred assistant coaching behaviours in other sports. For instance, players in different team sports might have differing opinions about the group dynamics in their sport and their preferred assistant coaching behaviours. Finally, the current study could also be replicated using different gender combinations of assistant coaches and athletes. For example, a female assistant coach might interact differently with a male athlete than a male coach would.

Conclusion

In conclusion, the current study extends our knowledge about the role of the assistant coach in gridiron football. Furthermore, it is among the first to explore athletes' perspectives of group dynamics in professional sport. Therefore, these findings are of use to members of professional gridiron football organizations, including general managers, head coaches, assistant coaches, support staff members, and athletes, by providing information about how both the

professional environment and group member (i.e., players, coaches) attributes influence team dynamics, and how these dynamics can affect player satisfaction and performance. While the findings of the current study might only be applicable to professional gridiron football in North America, it offers many possibilities for future research on group dynamics in professional sports, including gridiron football. For example, researchers should seek the perspectives of other stakeholders, such as coaches and general managers, to get a more complete understanding of this topic. As such, future research can help researchers, applied practitioners, and professional sport personnel better understand how to improve individual and team outcomes in professional sports, such as player satisfaction and team success.

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Appendix A – Recruitment Script

My name is Marc Glaude, and I am currently working towards a Master of Arts degree in sport psychology at McGill University under the supervision of Dr. Gordon Bloom. We would like to invite you to participate in our study examining the group dynamics on the offensive line in professional football. We are contacting you based on a set of criteria highlighting your athletic experience and achievement at the professional level.

If you choose to participate in this study, you will be asked to partake in a virtual interview that would last approximately one hour at a time that is convenient for you. The questions would revolve around your experiences as a member of the offensive line, and your interactions with your coaches.

The McGill University Ethics Board has reviewed and accepted this study for its adherence to ethical guidelines. All of the information provided will be confidential and the responses will only be analyzed by myself, my supervisor Dr. Gordon Bloom, and the research team. The interpretations and results will be sent back to you after the interview to ensure for accuracy and to allow you the opportunity to clarify any of your answers.

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 Research Laboratory has a history of producing influential research on sport coaching and leadership. Please visit our website if you would like to learn more about our research: https://www.mcgill.ca/sportpsych/.

Thank you for considering participating in this research project, and I look forward to hearing from you.

Sincerely,

Marc Glaude

Marc Glaude, B.Sc.
Master's Candidate, Sport Psychology
Dept. of Kinesiology & PE
McGill University, Montreal
marc.glaude@mail.mcgill.ca

Gordon A. Bloom, Ph. D. Full Professor
Dept. of Kinesiology & PE
McGill University, Montreal
gordon.bloom@mcgill.ca

Appendix B – Informed Consent Form

This study is in partial fulfillment of the requirements for the degree of Master of Arts for Marc Glaude, a current graduate student in sport psychology in the Department of Kinesiology and Physical Education at McGill University. You are invited to participate in the research study entitled: "Athletes' perspectives of group dynamics in professional gridiron football." If you choose to participate in this study, you will be asked to partake in a 75-minute, video and audio recorded virtual interview, without compensation. During the interview, you will be asked questions regarding your experiences on the offensive line in football and with your coaches.

At the end of the interview, you will have the opportunity to ask any questions or make any additional comments that were not discussed throughout the interview. Your identity will **remain confidential at all times** and the primary researcher, Marc Glaude, and the faculty supervisor, Dr. Gordon Bloom, will be the only individuals with access to a copy of the responses. All of the data, including the recorded copy of the interview and the consent form will be stored in an encrypted folder on a password-protected computer for seven years. Any paper copies of notes will be converted into digital files and destroyed at the end of the study. The information gathered from the study will be used solely for conference presentations and journal article publications and your confidentiality will be maintained and respected throughout the entirety of the process. **Your participation in this study is voluntary and not mandatory**, therefore you have the ability to refuse to answer any questions without penalty and if you choose to withdraw from the study at any time, all information attained up until that point will be destroyed.

After reading the above statements you can now provide consent to voluntarily agree to participate in this research study based on the terms outlined in this consent form. You will be provided with a signed copy of this consent form. If you have any additional questions or concerns regarding your rights and welfare as a participant in this research study, please feel free to contact lynda.mcneil@mcgill.ca or at 514-398-6831. Please sign below if you agree to participate:

Signature	Date	

I agree (CHECK YES \square OR NO \square) to the visual and audio recording of the virtual interviews with the understanding that these recordings will be used solely for the purpose of transcribing these sessions.

Marc Glaude, B.Sc.
Master's Candidate, Sport Psychology
Dept. of Kinesiology & PE
McGill University, Montreal
marc.glaude@mail.mcgill.ca

Gordon A. Bloom, Ph.D.
Full Professor
Dept. of Kinesiology & PE
McGill University, Montreal
gordon.bloom@mcgill.ca

Appendix C – Semi-Structured Interview Guide

Pre-Interview Routine

- Introduction of the researcher
- Consent form

Opening Questions

- 1. Please tell me briefly about any sports, other than football, that you have played at the elite level of competition.
- 2. Briefly describe your journey to becoming a professional football player.
 - a. How important is it to you to be a professional football player?
 - b. What are your current goals as a professional football player?
- 3. Please tell me what you find most satisfying and rewarding about playing on the offensive line.
 - a. How are offensive linemen different than other position players?

Key Questions

- 4. With regard to building strong team chemistry on the offensive line, can you describe some of your experiences with both ideal and less than ideal teammates?
 - a. Practice behaviours.
 - b. Game-day behaviours.
 - c. Locker room behaviours.
 - d. Off-field behaviours.
 - e. How do these behaviours affect you personally?
- 5. When you think of the offensive lines that you have played on over your career, can you describe your experiences on both the most and least cohesive groups?

- a. Practice interactions.
- b. Game-day interactions.
- c. Locker room interaction.
- d. Off-field interactions.
- e. Dynamics between starters and non-starters.
- 6. When you think about the offensive line(s) that you played on that was (were) the most cohesive, describe the impact of the offensive line coach and how his behaviours might have affected the cohesion.
- 7. When you think of the best offensive line coach(es) you have had, can you describe how he interacted with you and how he impacted the cohesiveness of the line?
 - a. How were his interactions with other players (consistent, fair)?
 - b. How did he treat starters? Non-starters?
- 8. When you think of the worst offensive line coach(es) you have had, can you describe how he interacted with you and how he impacted the cohesiveness of the line?
 - a. How were his interactions with other players (consistent, fair)?
 - b. How did he treat starters? Non-starters?
- 9. Other than the offensive line coach, what other staff members have an influence on the cohesion of the offensive line?
 - a. Offensive coordinator.
 - b. Head coach.
 - c. Other assistants.
- 10. How do the interactions between your offensive line coach, offensive coordinator, and head coach affect cohesion between the players on the offensive line?

11. Describe how playing offensive line on a **professional team** compares to playing offensive line at college/university or high school.

- a. Player salaries.
- b. Media.
- c. Roster turnover.
- d. Coach turnover.
- e. Job instability.

Summary Questions

- 12. What major factors do you perceive facilitate good or bad chemistry on the offensive line of a professional football team?
- 13. If you were asked to provide an offensive line coach entering professional football with advice on how to have a positive impact on the group's dynamics in the form of a list of do's and don'ts, what would your list include?

Concluding Questions

- 14. Is there something that we didn't cover in the interview that you would you like to add?
- 15. Do you have any final questions or comments you would like to share?

Probes: Key phrases to stimulate reflection

- Can you expand on that?
- Can you clarify that?
- That's interesting, tell me more about that.
- Could you please tell me more about this?