Crafting Expertise: A Qualitative Exploration of Coaching Development in College Football

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by

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Abstract

This qualitative study investigates the development of coaching expertise within Division I college football, conceptualizing the coaching staff as Mission Critical Teams (MCTs) within a situated learning framework. Through phenomenological analysis of 27 semi-structured interviews with current and former Division I head football coaches, this research uncovers the indigenous and informal pathways for acquiring, adapting, and transmitting foundational yet often tacit knowledge. Key findings include the identification of authenticity, markers of expertise, developmental mechanisms, and reflection as critical to the evolution of coaching expertise. Notably, authenticity is highlighted as a crucial precursor and sustained cornerstone to cultivating expertise, with reflective practices acting as pivotal bridges within the experiential and situated learning processes that can address the tacit knowledge transfer problem (TKTP). The study underscores the significant role of situated learning environments in fostering coaching expertise, advocating for the enhancement of these native environments beyond formalized programs. Recommendations for integrating authentic and reflective practices into coaching development initiatives are presented, aimed at strengthening the learning landscapes inherent to sports coaching. The implications of this research also extend to higher education, proposing that advanced coaching methodologies can enrich the holistic development of student-athletes, thereby supporting the educational missions of collegiate athletics programs.

Keywords: coaching development, college football, situated learning, Mission Critical Teams, coaching expertise, tacit knowledge transfer, authenticity, reflective practice, higher education

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Dad,

I understand more, now.

Thank you.

Love,

Joe

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To my mom

Laura, for a curious spirit – I love you

To my advisor and chair

Christian, for helping me grow – without you, none of this would have been possible

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To coaches

Bronco, for inspiring a different approach

Tony, for belief and generous support

To the participants

Your willingness to share may help us all

To everyone else

Your contributions made a difference

To all

These words will never be enough

This was fun

And is just the start

Thank you

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Chapter 1 - Introduction

Introduction

Football in higher education institutions is more than just a game – it's a significant cultural, economic, and social influencer for both the institution and the community (Clotfelter, 2019; Toma, 2003). Football coaching staff, therefore, do not merely shape athletic endeavors but contribute to the shaping of the institutional identity, culture, and values. Coaches navigate through the complexity of their profession with ramifications that extend beyond the athletic field, reverberating through the very foundations of the educational institutions of which they are apart. Recognizing this, it's surprising to note that formal leadership preparation for sport coaching is uncommon. Instead, most sport coaches develop leadership skills informally, learning predominantly from experiences and interactions with peers (Cushion et al., 2010).

Recognizing the limited presence of formal leadership training in sport coaching, it becomes crucial to understand the nuances of how football coaches in higher education environments cultivate their expertise. This research delves into the mechanisms of coach training and education, not to propose a structured coaching program, but to enhance the facilitation of the existing informal and situated learning environments within sports coaching. As Cushion et al. (2010) suggest, these environments often reflect real-world coaching dynamics more than formal programs and present a valuable avenue for effective coach development.

This study aims to shed light on effective strategies for coach development, ultimately fostering a holistic developmental environment for student-athletes. By focusing on the authentic dynamics of informal and situated learning environments, the research seeks to unveil strategies pivotal for coach development and reinforce the intricate and multifaceted impact of football within higher educational institutions.

Problem Statement

A football coaching tree can be thought of like a family tree where instead of familial relationships, it illustrates the relationships between coaches. Typically, coaching trees highlight the relationships between head coaches and their assistant coaches, illustrating the professional networks that they form. These trees have been shown to have implications for development and success as a football coach (Elliott et al., 2014; Fast & Jensen, 2006; McCullick et al., 2016; Rockhill, 2020). Professional coaching networks play a critical role in shaping the broader communities of practice (CoP) of which coaches are a part. A CoP is defined as a group of individuals who share a common interest and engage in collective learning through regular social interactions (Wenger, 1998). In the context of coaching, CoPs are essential for knowledge sharing and the creation of coaching expertise. This perspective is crucial because coaches gain most of their expertise through informal learning in social settings, stemming from their experiences and interactions with other coaches (Cushion et al., 2003; Cushion et al., 2010).

Mission Critical Teams (MCTs) as a Specialized Form of CoPs

Mission Critical Teams (MCTs), a specialized form of CoPs, are teams of 4-12 people who are indigenously trained and educated to resolve rapidly emergent complex adaptive problem sets (RECAPS) in an immersive but time constrained environment of five minutes or less, where the consequence of failure is catastrophic (Cline, 2017). MCTs are primarily studied in the contexts of emergency medicine, urban and wildland firefighting, tactical law enforcement, and military special operations (Mission Critical Team Institute, 2020). However, an interesting parallel can be observed in Division 1 FBS college football coaching staffs, which align with the structural composition of MCTs (NCAA, 2021) and are engaged in managing high-stakes, dynamic situations inherent to the sport, akin to resolving RECAPS. Finally, the

application of MCT dynamics to football coaching is significant, considering the consequential implications for team performance, reputation, job security, player safety, and institutional outcomes (Clotfelter, 2019, Holmes, 2011; Saal, 1991; Toma, 2003; Wolff et al., 2018).

Football coaching staff, as MCTs, undergo indigenous training and education, transitioning typically from player to coach (Dunn & Dunn, 1997; Tracy et al., 2018), and exhibit a form of situated learning through absorption of norms and values from experienced coaches. This alignment of football coaching staffs with MCTs underscores the criticality of understanding how learning and development occur within these specialized CoPs. It necessitates a thorough exploration of the situated learning environments within this domain, in order to optimize the development of coaching expertise and consequently enhance the multifaceted impact of football within higher educational institutions.

Situated Learning in Football Coaching

It is common for football coaches to have been players themselves prior to becoming coaches (Dunn & Dunn, 1997; Tracy et al., 2018). This transition often occurs through an indigenous training and education process in which former players enter the coaching profession as graduate assistant coaches (GACs), where they learn from and alongside current full-time coaches (FTCs) within the coaching MCT. Within this MCT, coaches primarily engage in informal learning (Cushion et al., 2010), defined as "the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes, and insights from daily experiences and exposure to the environment" (Coombs & Ahmed, 1974, p.8). Throughout their careers, coaches continually learn and develop expertise within the social context of their MCT.

The development of coaching expertise can be understood through the lens of situated learning (Lave & Wenger, 1991), which highlights the importance of social and experiential

learning in the context of a CoP. This concept is particularly relevant for exploring the informal manner in which expertise is developed in the complex and dynamic context of football coaching. In situated learning, the significance of social and experiential learning within a Community of Practice (CoP) is paramount. Here, newcomers become part of a CoP, embarking on a journey of legitimate peripheral participation (LPP), as termed by Lave and Wenger (1991). This journey begins at the community's periphery, where novices engage in meaningful yet initially less complex tasks that match their early expertise. Over time, with the accumulation of experience and knowledge, their engagement and responsibilities within the CoP progressively expand, mirroring the evolution of their expertise.

Legitimate peripheral participation allows novices to learn and hone their skills alongside and with the support of experts within the CoP, and provide opportunities to observe, imitate, and receive feedback from more experienced members (Lave & Wenger, 1991). As novices progress over time, they eventually become experts themselves, contributing to the continuous growth and improvement of the community (Lave & Wenger, 1991).

By emphasizing the importance of social interactions and the gradual integration of novices towards expertise in the community, situated learning and the concept of legitimate peripheral participation provide a useful framework for understanding how coaches develop expertise within their communities of practice.

Expertise Development and Tacit Knowledge in Football Coaching

Football coaches at the highest levels face immense pressure to achieve and maintain success, as their careers often depend on producing winning teams within short timeframes. If they fail to do so, they risk dismissal (Holmes, 2011; Mielke, 2007; Roach, 2016). At the collegiate level, a study of head football coach dismissals between 1983 and 2006 revealed that a

third of all dismissals (68 out of 196) occurred within the first four years of a coach's tenure (Holmes, 2011). A similar phenomenon takes place within the professional ranks as well; in fact, Roach (2016) found that, between 1995 and 2012, an average of 22% of NFL teams underwent a coaching change each year. This high turnover rate not only demonstrates the precarious nature of football coaching careers but also presents significant financial challenges for the institutions involved. Between 2012 and 2022, public universities spent an astounding $530 million on coach dismissals (Baker, 2022), underlining the substantial economic consequences of the frequent coaching changes and highlighting the urgent need for coaches to develop the necessary expertise to achieve sustainable success and maintain their positions in such competitive environments.

In order to ensure success and longevity in their careers, football coaches as members of an MCT require the expertise to navigate the complexity of the interconnected human, technical, informational, and environmental variables intrinsic to their profession (Cline, 2017). Examples of this expertise include, but are not limited to, game analysis, strategic planning, innovative training practices, dynamic in-game adjustments, player development, talent evaluation, and effective team leadership to navigate the complexities of their profession successfully (Garda, 2013). This expertise proves especially important during competitive work (Rhodes, n.d.) when making effective decisions within the context of a MCT. In mission-critical situations, dealing with rapidly emergent complex adaptive problem sets (RECAPS), the quality of decision-making can profoundly influence the outcome (Klein, 1999) as is the case in football during gameday competition. Failure to master these aspects of MCT leadership can potentially lead to mismanagement of the interconnected variables, culminating in suboptimal decisions and an increased risk of critical failure as was seen in the world of wildland firefighting in the South

Canyon Fire (Useem et al., 2005). Therefore, developing the necessary expertise to guide their teams effectively through both the navigation of these variables and critical decision-making is crucial for coaches striving to achieve sustainable success in their careers.

The challenges in achieving sustained coaching success may be attributed to the indigenous and situated nature of coach training and education. The experiential and interactive ways in which coaches develop their expertise in and amongst their MCTs leads coaches to acquire tacit knowledge, which is a type of knowledge gained subconsciously on the job or in the context where it is applied (Polanyi, 1966). Tacit knowledge, being "difficult to codify, communicate, describe, replicate, or imitate, because it is the result of human experience and human senses" (Mohajan, 2016, p.2), underpins the expertise (Cianciolo et al., 2006) that coaches rely on to successfully navigate the interconnected human, informational, technological, and environmental variables coaches face in their careers.

The Role and Challenges of Tacit Knowledge in Coaching

In a profession where indigenous, informal, and situated learning is prevalent (Cushion et al., 2003), the tacit knowledge transfer problem (TKTP) arises (Cline, 2017). The TKTP posits that "although people's actions may reflect their knowledge, they may find it difficult to articulate what they know" (Nash & Collins, 2006, p. 470). For example, an expert coach may intuitively know how to motivate a particular player but struggle to explain the specific techniques or reasoning behind their approach. This struggle may hinder coaches' abilities to develop and refine their expertise, as effective organizational knowledge sharing contributes to learning and improvement within a community (Argote et al., 2003). The complexities of knowledge transfer in organizational settings, as discussed in the broader literature on knowledge

management (Argote et al., 2003), underscore the challenges faced in coaching contexts where tacit knowledge is prevalent.

Coaches learn and internalize coaching methods through participation and observation, and these methods are deeply ingrained in a specific culture (Cushion et al., 2003). Without deliberate attention, reflection, and targeted training and education, suboptimal coaching habits may emerge or perpetuate within a coaching MCT. Furthermore, an unreflective and indigenous process of training and educating football coaches without effective knowledge management could lead to robotic practitioners who uncritically adopt the methods of their mentors (Cassidy, 2004). Given the constant pressure on coaches to achieve victories in such short timeframes, it seems logical that they would be incentivized to address immediate issues rather than seizing fundamental, long-term opportunities for improvement. As a result, coaches may adopt a detrimental approach to defining "good practice" as that which "solves the immediate problem at hand [or] gets coaches 'through the [coaching] session' without major disruptions" (Cassidy, 2004, p. 14).

If novice coaches are exposed to practices that prioritize short-term success over the development of fundamental expertise for navigating the interconnected variables that coaches face, they are likely to replicate these practices, as coaching methods are often deeply ingrained in a specific culture through participation and observation (Cushion et al., 2003). Effective knowledge management strategies can provide a sustainable competitive advantage (Davenport & Prusak, 1998; Grant, 1996), and in coaching it may enable coaches to leverage the collective experience and expertise within the community to a higher degree. By investigating and enhancing the situated learning environments within football coaching CoPs, the transfer of tacit knowledge may be improved, leading to increased opportunities for better training and

education. This approach may foster the development of innovative coaching practices and can ultimately lead to improved decision-making in mission critical situations. As a result, coaching successes may become more sustained. Developing expert level proficiency not only enhances a team's overall performance, adaptability, and resilience but also better equips coaches to navigate the fundamental uncertainties they will face. Such expertise is pivotal for achieving successful outcomes in the face of great uncertainty and complexity (Crandall & Getchell-Reiter, 1993; Hammon & Horowitz, 1990; Klein, 1999).

Towards a Comprehensive Approach in Coaching Expertise Development

This research adopts a process-oriented approach, emphasizing the dynamics of cultivating expertise needed to successfully navigate the complexities arising from the interconnected human, technical, informational, and environmental variables within coaching communities of practice. Rather than attempting to create a formalized coach development program, this study seeks to uncover insights on where to enhance facilitation of the existing informal and situated learning environments prominent in sports coaching. The study's focus on informal and situated learning environments is based on the premise that these environments often reflect the actual dynamics of coaching more authentically than formal programs (Cushion et al., 2010), and thus hold invaluable insights for coach development. To achieve this aim, the study will delve into the experiences and perspectives of head football coaches. The focus will be on coaches' understandings of expertise development within the context of a football coaching MCT, offering an authentic perspective on the real-world process of coach development.

Research Questions

1. How do football coaches conceptualize expertise?
2. How do football coaches develop expertise?

3. What role does situated learning play in the expertise development of football coaches?
4. How is tacit knowledge transferred among football coaches?
    a. Where do challenges and barriers exist in this transfer process?

Theoretical Framework

This research is guided by the theoretical frameworks of the Situated Learning Theory (SLT) and the concept of Communities of Practice (CoP). These interrelated theories provide a fundamental understanding of the evolution of coaching expertise among college football coaches within the context of Mission Critical Teams (MCTs).

SLT, developed by Lave and Wenger (1991), posits that learning is a social process where individuals acquire knowledge and skills within the context where they apply them. This symbiotic relationship between the individual and the sociocultural environment is best represented in Figure 1, which illustrates the learning environment, or "Community of Practice" (CoP).

Within this study, the CoP is embodied by college football coaches as an MCT, a specialized form of CoP. Bound by shared goals and common challenges, these individuals learn from each other's experiences, thereby contributing to their individual and collective knowledge base. The CoP/MCT lens allows for an exploration of how shared learning and the co-construction of knowledge within this community fosters the development of coaching expertise.

Figure 1 delineates the novice's journey from the periphery of the community, where participation is legitimate, serving the competitive work (Rhodes, nd.), but is more peripheral, to the center of the CoP, marking their transition to active engagement and expertise. Experts, positioned at the center, help facilitate this journey through interactions with novices such as mentorship, modeling, and feedback. This trajectory, influenced by interactions within the CoP,

lays the theoretical foundation for understanding how college football coaches develop their expertise.

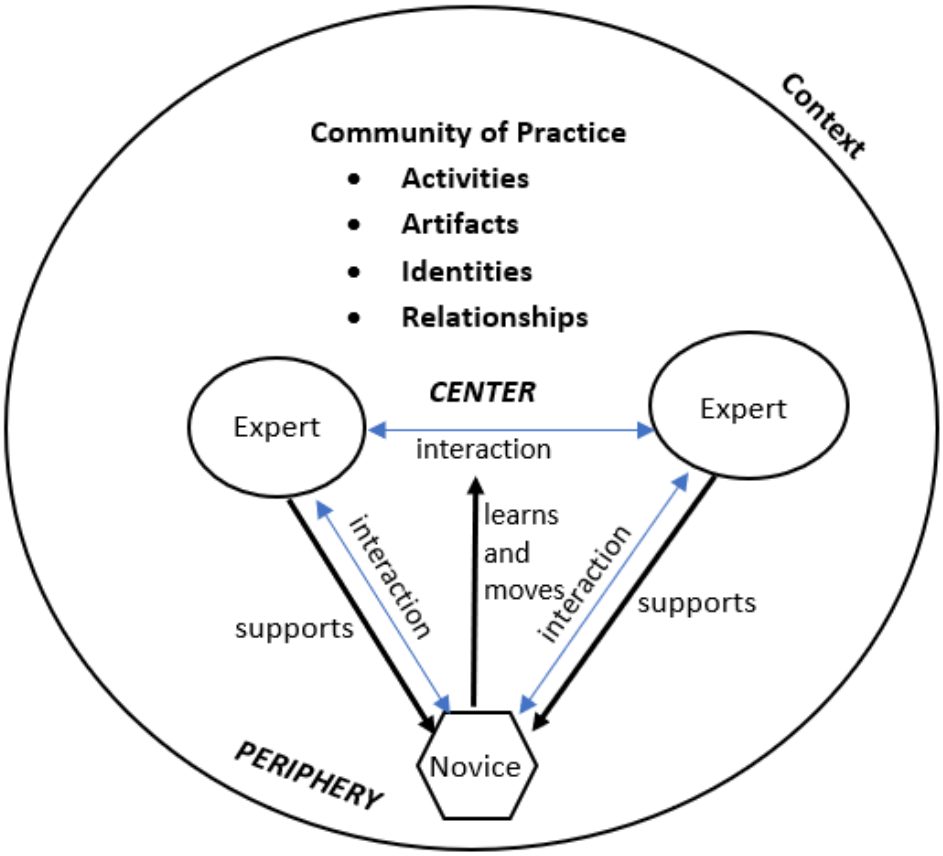
Moreover, the CoP concept, as elaborated by Wenger (1998), refers to groups sharing a common passion, concern, or problem, enhancing their expertise through regular interaction. This consistent interaction fosters a shared repertoire of resources - experiences, stories, tools, and ways of addressing recurring problems - marked by activities, artifacts, identities, and relationships within the CoP (Figure 1). Within a CoP, activities refer to shared practices enabling knowledge dissemination. Artifacts, both tangible and intangible, serve as tools or symbols used by the community. Identities relate to members' roles within the CoP, influencing and influenced by their participation. Relationships, the social bonds within the CoP, shape interactions and foster knowledge sharing and learning.

Previous coaching literature has utilized SLT and CoP to investigate various aspects of coaching, such as coach learning (Culver & Trudel, 2006), coach development (Stoszkowski & Collins, 2014), and knowledge sharing among coaches (Culver et al., 2009). These studies underscore the value of these theoretical perspectives in understanding the complexities of the coaching profession.

In this study, the SLT and CoP frameworks will be utilized to examine how coaching expertise is developed and how best practices for navigating uncertainty are established within the context of MCTs. This perspective offers a nuanced exploration of how the sociocultural context of college football coaching influences coaches' learning and how the collective knowledge of this community of practice can be leveraged to inform coaching practices.

Figure 1

Model of Situated Learning Theory



(Mina Herrera, n.d.)

List of Terms

- **Community of Practice (CoP)**: A group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis (Wenger, 1998).
- **Competitive Work:** Refers to the essential and strategic tasks within an organization that are central to its core competence. This type of work is crucial for creating and

maintaining a sustainable competitive advantage and distinctiveness. It often involves activities that are fundamental to the organization's mission and objectives.

- **Division I (DI) Football coaching**: Pertains to coaching in Division I Football, the highest level of intercollegiate athletics sanctioned by the National Collegiate Athletic Association (NCAA) in the United States.
- **Football Coaching Tree**: A visual representation of the relationships and influences between different football coaches, often tracing back to a notable or influential coach.
- **Good Practice**: A technique, method, or process that has been shown to produce superior outcomes compared to other methods.
- **Immersive**: In the context of football coaching, this refers to the deep involvement or engagement required during a time constrained decision-making process, demanding full attention and adaptability to rapidly changing circumstances.
- **Indigenous Training and Education**: Learning processes that are deeply rooted in the local context and culture, often informal and community-based.
- **Informal Learning**: Unstructured, non-formal learning that occurs through daily activities and interactions, outside of traditional educational settings.
- **Knowledge Management/Sharing**: The process of creating, sharing, using and managing the knowledge and information of an individual or organization.
- **Legitimate Peripheral Participation (LPP)**: A concept from situated learning theory that describes how newcomers become part of a community of practice, starting from peripheral tasks and gradually moving towards more central roles (Lave & Wenger, 1991).

- **Mission Critical Team (MCT)**: Teams of 4-12 people who are indigenously trained and educated to resolve rapidly emergent complex adaptive problem sets (RECAPS) in an immersive but time constrained environment of five minutes or less, where the consequence of failure is catastrophic (Cline, 2017).
- **Process-oriented approach**: An approach that emphasizes the methods, considerations, and actions taken to achieve a result, rather than focusing only on the result itself.
- **Qualitative indicators**: Metrics or signs that can't be measured in numbers but are still significant in evaluating outcomes. These indicators are often related to experiences, perceptions, or feelings.
- **Rapidly Emergent Complex Adaptive Problem Sets (RECAPS)**: "Novel [problems], with multiple touch points, that learn and adapt as we interact with them" (Cline, 2017, p. 28). They demand immediate response and adaptability from teams, particularly Mission Critical Teams, who must adjust and learn in real-time to navigate and resolve these issues effectively.
- **Situated Learning Theory (SLT)**: A theory of learning that posits we learn in the same context in which we apply our knowledge (Lave & Wenger, 1991).
- **Tacit Knowledge**: Knowledge that's difficult to write down, visualize or transfer from one person to another because it's deeply ingrained in experience and is often taken for granted.
- **Tacit Knowledge Transfer Problem (TKTP)**: The difficulty or challenge in conveying tacit knowledge due to its deeply ingrained and often subconscious nature.

Chapter 2 - Literature Review

Introduction

This chapter aims to synthesize and review the body of literature surrounding football coaching and athletics' nexus with higher education, MCTs as a lens for understanding football coach training and education, the development of expertise, and the transfer of tacit knowledge through situated learning within communities of practice, all while identifying gaps in the literature with regards to coaching. This review employs an interdisciplinary lens, drawing upon research from fields such as cognitive science, sociology, and sport science, reflecting the diverse nature of the subject matter. Finally, this review is designed to logically underpin the research questions that guide this research effort:

Research Questions

1. How do football coaches conceptualize expertise?
2. How do football coaches develop expertise?
3. What role does situated learning play in the expertise development of football coaches?
4. How is tacit knowledge transferred among football coaches?
    a. Where do challenges and barriers exist in this transfer process?

The Nexus with Higher Education

In unraveling the intricacies of MCTs and their inherent dynamics in relation to football coaching, an understanding of the higher education context, characterized by the convergence of institutional identities, priorities, and big-time sports (Clotfelter, 2019), becomes indispensable. Football coaching interweaves with consequential decisions, institutional reputations, student-athlete development, and institutional identity stability, underscoring the significance of the

indigenous and situated ways in which football coaches are trained and educated within the context of higher education.

Consequential Decisions and Institutional Reputations

Within the interdependent environment of higher education, the decisions and leadership of football coaches reverberate through the institution, with potential ramifications on its reputation, financial stability, and the developmental trajectories of student-athletes (Toma, 2003). As both Clotfelter (2019) and Toma (2003) underscore, big-time sports (namely football) have been ingrained into the identity of American universities; football both impacted by and helps shape the intricacies of institutional ethos and priorities. A coaching misjudgment or failure in this high-stake environment can cascade into reputational, legal, and financial repercussions (Miller et al., 2021) and can even put university accreditation at risk (Heim, 2019). This was the case following the tragic death of Maryland Football offensive lineman Jordan McNair in June of 2018 (Miller et al., 2021). Effective coach development must extend beyond sports tactics, encompassing an understanding of the broader institutional impact of coaching decisions. This holistic approach ensures that coaches are not only successful in their immediate roles but also contribute positively to the university's reputation, ethical standards, and long-term goals.

Student-Athlete Development

The developmental pathways of student-athletes, pivotal components of the university ecosystem, are inherently influenced by the experiences, interactions, and learning environments provided by the institution and its athletic programs (Comeaux & Harrison, 2011). Intercollegiate sport participation can have both a negative effect on student development such as psychological issues at rates higher than campuswide averages (Watson & Kissinger, 2007) while also having long-term benefits such as providing values and lessons that can be carried on into post-graduate

life (Plunkett, 2013) illustrating the complex impact that intercollegiate sports can have on the student-athletes. In this nuanced symbiosis, the role of the coaching staff is crucial, orchestrating environments that are conducive to academic achievement, athletic excellence, and personal growth, harmoniously balanced to foster holistic development (Grams, 2023). Because coaches can play a pivotal role in these developmental pathways, a deeper exploration into coaching expertise becomes paramount to ensure student-athletes reach their full potential.

Coach Career Trajectories and Institutional Identities

In the realm of collegiate football, coaches tread a career path marked by stark volatility and high turnover rates. Notably, a third of collegiate head football coach dismissals occur within the initial four years of their tenure (Holmes, 2011). Furthermore, between 2003 and 2008, 68% of Division I institutions replaced their head football coach (Harrison et al., 2009). This volatility has major financial implications. For example, between 2012 and 2022, public universities spent $530 million on these coach dismissals (Baker, 2022), underlining the impact that coaching turnover has on institutions' financial identity.

In the context of higher education, coaches are more than just strategists of the game; they play a pivotal role in shaping and upholding the sports-centered identities of universities. They become integral cogs in the machinery of institutional identity (Clotfelter, 2019). Consequently, the twists and turns of a coach's career not only resonate with their personal trajectories but also have ramifications for the very identity of the institutions they represent. Such instability underscores the imperative to develop coaching expertise in service of greater institutional stability. This concern isn't confined to the realm of sports but extends deep into the broader landscape of higher education, especially given the documented adverse effects of

organizational turnover such as declining productivity, sagging morale, and performance improvement (Abbasi & Hollman, 2000; Watrous et al., 2006).

Summary

Coaches in collegiate football hold roles that extend far beyond game strategy, deeply influencing both the developmental trajectories of student-athletes and the overarching reputation of universities (Clotfelter, 2019; Comeaux & Harrison, 2011; Heim, 2019; Miller et al., 2021; Toma, 2003). The high turnover rates among football coaches (Holmes, 2011; Harrison et al., 2009) magnify the critical interplay between coaching stability and institutional identity. These dynamics make it imperative to focus on enhancing coaching expertise, not just for the sake of athletic success, but to fortify the broader objectives and values of the institutions they serve. Such enhancement also acts as a buffer against the challenges posed by organizational turnover (Abbasi & Hollman, 2000; Watrous et al., 2006), ensuring both athletic and academic excellence is maintained.

Mission Critical Teams (MCTs)

Chapter one introduced the concept of Mission Critical Teams (MCTs), as defined by Cline (2017). These teams play a pivotal role in addressing rapidly emergent complex adaptive problem sets (RECAPS) within time constrained environments. These MCTs have been primarily discussed in fields such as emergency medicine, urban and wildland firefighting, tactical law enforcement, and military special operations (Mission Critical Team Institute, 2020).

The comprehensive definition of an MCT is critical, as it encompasses several facets that reveal the intricate dynamics of these specialized teams. This section will examine the definitional elements of an MCT with a focus on their relevance to football coaching. Special attention should be placed on the indigenous training and education of MCT members,

recognizing this aspect as especially salient in the development of coaching expertise. This nuanced exploration will highlight how indigenous training and education practices contribute uniquely to the evolution of coaching expertise within the dynamic and high-stakes environment of collegiate football.

MCTs as a Lens to Look at Football Coaching CoPs

MCTs present a unique and valuable setting for the study of coaching within the sport of football. Cline (2017) categorizes MCTs as teams of 4-12 individuals, drawing upon small group theory (Hackman, 2002). In Division 1 FBS college football, the NCAA Manual specifies a limit of one head coach, 10 assistant coaches, and four graduate assistant coaches as countable coaching staff (NCAA, 2021). Although this amounts to a total of 15 coaches, football coaching staffs are generally divided into offensive and defensive groups, each typically consisting of five assistant coaches and two graduate assistant coaches. These distinct groups oversee their corresponding offensive or defensive units.

Indigenous Training and Education in Football Coaching

MCT members undergo indigenous training and education (Cline, 2017). “By indigenous, it is meant that members of the instructor cadre were current or previous members of the teams themselves, who relied on their previous lived experience as a candidate in the program to inform their instructional practice” (Cline, 2017, p. 2). To become part of an MCT instructor cadre, individuals receive training and education directly from the team itself. In the realm of football coaching, it is common for coaches to have been players before transitioning into coaching roles (Dunn & Dunn, 1997; Tracy et al., 2018). In collegiate football, this transition often occurs through an indigenous training and education process, where former players enter the coaching profession as graduate assistant coaches (GACs) and are developed in,

amongst, and by current full-time coaches (FTCs). This kind of indigenous training and education process also aligns with Lave and Wenger's (1991) concept of situated learning, wherein communities of practice provide a context for novices to learn through apprenticeship and the internalization of norms, behaviors, and values through socialization with experts. These concepts will be discussed later in this review. This focus on indigenous training and education is pivotal, as it encapsulates the unique journey from player to coach, a transition rich in tacit knowledge crucial for developing deep expertise in the highly dynamic field of football.

Rapidly Emergent Complex Adaptive Problem Sets (RECAPS) in Football

The competitive work (Rhodes, n.d.) of MCTs centers on resolving rapidly emergent complex adaptive problem sets (RECAPS), which are “novel [problems], with multiple touch points, that learn and adapt as we interact with them” (Cline, 2017, p. 28). In the context of football, RECAPS are primarily evident during games and practices. For example, an offensive play-caller must navigate a multifaceted decision-making process, taking into account factors such as the game situation, time on the clock, available offensive personnel, and the opposing defense, among other challenges. Notably, the defense also adapts its strategy based on the offense's actions on a play-by-play basis.

Immersive, Time-Constrained Environments in Football Coaching

Another essential element of the MCT definition is the immersive and time constrained environment in which these teams competitively operate (Cline, 2017). An immersive environment is characterized by the fact that once the Immersion Event Horizon is crossed—the boundary marking the transition between equilibrium and chaos—there is no pause button; only performance or catastrophic failure (Cline, 2017). Cline (2017) sets a five-minute time constraint for these environments. Though initially established based on the average time the human brain

can go without oxygen (Suominen et al., 2002), more relevant to the context of football, this constraint also underscores how the brain behaves differently under varying temporal environments (Kahneman, 2011). Traditional decision-making models may be useful in normal contexts, but they require time to think (Cline, 2017). In immersive and time constrained environments, decision-making on good days aligns more closely with Csíkszentmihályi's (1990) "flow experience" that emerges after long practice and preparation (Cline, 2017). In the context of football, the immersive, time-constrained environments characteristic of MCTs are present during practice sessions and games. In these settings, coaches are responsible for making critical decisions and engaging in strategic thinking. The ability to effectively make decisions in both situations is not accidental; rather, it is the result of extensive practice and preparation, and the successful navigation of connected human, technical, informational, and environmental variables that may ultimately condense into a radical change event (Cline, 2017).

Catastrophic Consequences of Failure in Football Coaching Context

The final aspect of Cline's (2017) definition of MCTs is the notion that mission failure is catastrophic. The nature of catastrophe is largely domain-specific and can differ significantly between various MCTs. While catastrophic consequences are intuitive in domains like emergency medicine, firefighting, tactical law enforcement, and military special operations, it might be less apparent in the context of football. In football coaching, catastrophic consequences are typically related to the team's performance, reputation, job security for the coaching staff (Holmes, 2011) along with major institutional impacts (Baker, 2022; Clotfelter, 2019; Toma, 2003). However, it is also imperative to note that football is a sport with the highest incidence of fatal brain and cervical spine injuries (Wolff et al., 2018), and teams with experienced coaches have lower injury risks (Saal, 1991). This domain-specific nature of catastrophic consequences

underscores the importance of contextualized expertise development in MCTs. Members of MCTs must possess the knowledge and skills necessary to address the unique challenges and high-stakes situations within their specific domains.

Summary

In summary, the literature outlines the key characteristics of Mission Critical Teams (MCTs) such as their structure, indigenous training and education, confrontation with rapidly emergent complex adaptive problem sets (RECAPS), operation within immersive, time-constrained environments, and the catastrophic consequences of their failure. As Division I football coaching shares these traits, MCT research provides a useful context for the examination of football coaching, yet it remains a largely unexplored context. Despite the clear parallels between MCTs and football coaching, substantial gaps exist in the literature, primarily due to the lack of exploration of MCT principles within the realm of athletics and specifically football coaching. This research specifically aims to investigate the indigenous training and education of MCT members in the realm of football coaching.

Conceptualization and Development of Expertise

Expertise is a nuanced construct, manifesting itself as an interplay between deep domain-specific knowledge, extensive experience, and proficient problem-solving skills (Chi et al., 2014; Ericsson & Charness, 1994). Experts stand out in their ability to rapidly process and interpret complex information, recognize patterns, and make accurate decisions even under extreme pressure (Klein, 1999). The role of expertise within MCTs is paramount given the complexities and high-stakes nature of their operational environments.

The development of expertise is not a linear process, and several theories and models have sought to capture its essence. Ericsson et al.'s (1993) model of deliberate practice, premised

on sustained, conscious efforts aimed at improving performance, is one such influential model. It emphasizes that reaching an expert level requires not just extensive practice, but practice that is purposeful and challenges existing performance levels. Developing expert level proficiency can enhance a team's overall performance, adaptability, and resilience, ultimately contributing to successful outcomes in the face of great uncertainty and complexity (Crandall & Getchell-Reiter, 1993; Hammon & Horowitz, 1990; Klein, 1999).

Expertise and MCT Outcomes in Practice

Research on expertise in traditional MCTs in practice has underscored the importance of expertise in enhancing performance, decision-making, and overall success (Crandall & Getchell-Reiter, 1993; Hammon & Horowitz, 1990; Klein, 1999).

Research on the Critical Decision Method (CDM) in the context of neonatal intensive care unit (NICU) nurses revealed that expert NICU nurses could recognize patterns and diagnosing critically ill babies, sometimes even before hospital tests could. This expertise allowed for quicker and more accurate assessments and decisions, ultimately saving the lives of vulnerable infants (Crandall and Getchell-Reiter, 1993).

In the aviation domain, Hammon and Horowitz (1990) addressed the relationship between flying experience and performance in aircrew missions. Both short-term and long-term experience contributed to proficiency, with career experience having a stronger impact on performance. The importance of this expertise became evident in mission-critical situations such as bombing accuracy, aircraft carrier landings, and air combat maneuvering exercises, where expert decision-making and skill execution were paramount.

Klein (1999) explored the expertise of firefighters and its impact on decision-making in emergency situations. According to Klein, experts possess the ability to see the invisible by

identifying crucial relationships and environmental factors that novices may overlook. For example, he notes, “Novices have difficulty seeing relationships that are obvious to experts. We found that fireground commanders could look at a burning building and know what was happening inside. They could envision stairways, elevator shafts, and roof supports and how each was being affected by the fire” (Klein, 1999, p. 150). This expertise allowed them to make critical decisions during emergencies, such as assessing the structural integrity of a burning building and determining the most effective response strategies.

The role of expertise in diverse MCT practice is pivotal, significantly enhancing team performance, shaping effective decision-making, and securing successful outcomes in highly complex and high-stakes environments. Whether it is the pattern recognition skills of NICU nurses, the experience-derived proficiency of aircrew members, or the intuitive understanding of structural integrity by fireground commanders, these examples illustrate the power of expertise. Yet, the literature falls short in addressing how this level of expertise impacts the navigation of interrelated human, technical, informational, and environmental variables (Cline, 2017) in the world of sports, specifically Division I college football coaching.

MCT Expertise Development

The development of expertise in traditional MCTs, such as those operating within the military and emergency medicine fields, is often multifaceted. Research indicates that it typically encompasses a mix of formal and informal learning experiences, including situated learning within communities of practice, simulations, and on-the-job training (Adkins et al., 2010; Rosen et al., 2012; Salas et al., 2006; Salas et al., 2008).

In the realm of sports coaching, the development of expertise bears some similarities. Coaches are found to learn most frequently and often prefer to learn from informal sources

(Walker et al., 2018). In a survey of 798 sports coaches, Van Woezik et al. (2021) found that the most prevalent sources of expertise development were interacting with other coaches, learning by doing, and observing others, demonstrating parallels between learning experiences found in traditional MCTs.

However, research specifically addressing the development of expertise within the context of football coaching is notably scarce. As a result, a distinct gap exists, highlighting the need to explore and understand the processes involved in developing coaching expertise within this unique, high-stakes environment. Such an exploration not only has direct implications for football coaching but also holds the potential to enrich the broader sport coaching literature and potentially extend our understanding of expertise development in MCTs generally.

Expertise, Tacit Knowledge, and the Tacit Knowledge Transfer Problem

A significant obstacle in the progression towards expertise lies in the management of tacit knowledge. Coined by Polanyi (1966), tacit knowledge serves as a counterpoint to explicit knowledge. Explicit knowledge can be straightforwardly expressed, coded, and transmitted through formal channels like verbal directions or written documentation (Nonaka & Takeuchi, 1995). In contrast, tacit knowledge is primarily acquired through direct experience, personal insights, observation, and the process of learning by doing. It is deeply ingrained in an individual's experiences and actions, rendering it inherently difficult to express and transfer (Mohajan, 2016; Polanyi, 1966).

This form of knowledge embodies Polanyi's assertion: “we know more than we can tell” (1966, p.4). The elusive and intangible nature of tacit knowledge leads to the tacit knowledge transfer problem (TKTP) (Cline, 2017). While tacit knowledge may be difficult to pin down, it is a rich source of context-specific insights and intuitions that are obtained through experience,

observation, and interaction. The value of this knowledge within specific contexts is considerable, even though the capturing and transferring of such knowledge presents a significant challenge (Nonaka & Takeuchi, 1995).

Tacit knowledge has been closely associated with expertise, serving as a cornerstone in various expert performance demonstrations (Cianciolo et al., 2006). Rich with context-specific insights and intuitions, tacit knowledge often forms the bedrock of expert performance. For example, an expert coach may intuitively know how to motivate a particular player but struggle to explain the specific techniques or reasoning behind their approach. Alternatively, an expert football coach may have an instinctive understanding of when to enact a specific strategy during a game, yet articulating the exact rationale for their decision may be challenging. Thus, the challenges associated with tacit knowledge transfer and management hold substantial implications for the development and enhancement of expertise.

The acquisition of tacit knowledge through experiential, observational, and interactional methods aligns closely with the social and experiential aspects of expertise development in MCTs and sports coaching. Traditional MCTs underscore this development via situated learning, active participation in communities of practice, utilization of simulations, and on-the-job training (Adkins et al., 2010; Salas et al., 2006; Salas et al., 2008; Rosen et al., 2012). Similarly, in the realm of sports coaching, expertise is primarily fostered through social and experiential means, such as interacting with fellow coaches, learning by doing, and observing others (Van Woezik et al., 2021).

Recognizing the intricacies and hurdles linked with tacit knowledge acquisition is vital for enhancing expertise development in football coaching. Given the social and experiential nature of expertise development in MCTs and sports coaching, and the significant role tacit

knowledge plays in these areas, this research aims to explore the TKTP within the development of football coaching expertise.

Theoretical Underpinnings of Expertise Development and Tacit Knowledge Transfer

The previous discussions have illuminated the complexity of expertise, its development, and the central role of tacit knowledge. To better understand the underlying dynamics of these processes, this section will explore the theoretical frameworks of Situated Learning and Communities of Practice for expertise development. Further, this section will explore the Socialization, Externalization, Combination, and Internalization (SECI) Model along with the concept of 'Ba' with regards to tacit knowledge management and transfer. These theories provide insights into fostering expertise and facilitating tacit knowledge transfer, potentially providing strategies to address the tacit knowledge transfer problem (TKTP).

Situated Learning and Communities of Practice in Expertise Development

The frameworks of situated learning and communities of practice offer rich insights into the understanding of expertise development. These two concepts, deeply intertwined, emphasize the social, contextual, and participatory dimensions of learning (Lave & Wenger, 1991; Wenger, 1998).

Situated learning, proposed by Lave and Wenger (1991), posits that learning is deeply embedded within social interactions and the specific contexts in which it takes place. Learners are active participants, constructing their understanding through the nuances of their particular environments. Complementing this, Wenger's (1998) concept of communities of practice highlights the collective dimensions of learning, stressing that these communities form vibrant platforms for sharing experiences, insights, and strategies.

Situated learning and CoPs have been shown to have impacts on coach learning (Cassidy et al., 2006; Culver & Duarte, 2022; Culver & Trudel, 2006) and knowledge sharing amongst coaches (Culver et al., 2009). Despite the established significance of both situated learning and communities of practice in the broader domain of sports coaching, the literature exploring their specific roles and interplay within the distinct context of college football coaching remains limited. This lack of exploration represents fertile ground for research and helps to form the basis of the current study.

The SECI Model, 'Ba', and Tacit Knowledge Transfer

A further understanding of individuals' expertise development in a communal setting requires additional theoretical perspectives regarding tacit knowledge transfer. The SECI model (Nonaka and Takeuchi, 1995) and the concept of 'Ba' (Nonaka & Konno, 1998) can be seen as supplemental extensions to the situated learning and communities of practice models. They function as crucial mechanisms for the tacit knowledge transfer that is integral to expertise development, emphasizing the dynamic interaction between explicit and tacit knowledge in specific social and contextual settings.

The SECI model of knowledge creation and management describes a dynamic process of tacit and explicit knowledge conversion that consists of four stages:

1. Socialization: This phase signifies acquiring tacit knowledge through shared experiences, interactions, and observations (Nonaka & Takeuchi, 1995). For instance, in football coaching, a novice coach may learn from a seasoned coach by observing his training methods, communication style, and strategy development, thus gaining tacit knowledge that is often difficult to articulate.

2. Externalization: This phase encompasses the transformation of tacit knowledge into explicit knowledge (Nonaka & Takeuchi, 1995). For instance, a football coach may find ways to communicate complex strategies by developing diagrams, playbooks, or practice plans, thus transforming their internal, tacit understanding into explicit, shared knowledge.
3. Combination: This phase refers to the reconfiguration of existing explicit knowledge into new explicit knowledge (Nonaka & Takeuchi, 1995). For example, a football coach could gather various practice plans, strategy documents, and performance statistics (all forms of explicit knowledge) and combine them to form a unique training program for a specific season or game. This process creates new explicit knowledge from the existing pool.
4. Internalization: This phase involves embodying explicit knowledge into tacit knowledge (Nonaka & Takeuchi, 1995). For example, a football coach might apply a newly learned strategy in multiple games until it becomes a natural part of his coaching style. Through this process, the explicit knowledge of the strategy is internalized and becomes part of the coach's tacit knowledge base.

These stages unfold within a shared context, or 'Ba', a space in which knowledge is created, shared, and utilized (Nonaka & Konno, 1998). 'Ba', can be understood as a physical or virtual embodiment of communities of practice.

In football coaching, situated learning environments and communities of practice can be conceptualized as forms of 'Ba', providing shared contexts wherein the SECI process can organically occur. Therefore, these frameworks can be viewed as complementary, with situated learning and communities of practice providing a platform for the SECI process and 'Ba' concept to facilitate tacit knowledge transfer. For instance, in a football coaching scenario, 'Ba' could

manifest during team strategy meetings where coaches share insights and experiences. This environment facilitates the SECI process, allowing tacit knowledge about unique playing styles or team dynamics to be externalized and internalized, enhancing collective understanding and strategy development.

Though the SECI model and 'Ba' are studied largely in corporate settings (Nonaka & Takeuchi, 1995; Nonaka & Konno, 1998; Nonaka et al., 2000), their relevance to football coaching, particularly as complements to situated learning and communities of practice, is underexplored. Indeed, these settings can serve as forms of 'Ba'—spaces for the SECI process to unfold, providing critical insights into tacit knowledge transfer and expertise development.

Conclusion

The intricacies of expertise development and tacit knowledge transfer within football coaching are inherently tied to the socio-contextual dynamics that the aforementioned theoretical frameworks elucidate. Situated learning and communities of practice underline the importance of social, experiential, and contextual facets in building coaching expertise. The SECI model and the concept of 'Ba' further shed light on the processes facilitating the management and transfer of tacit knowledge within these learning environments and communities, providing a potential remedy to the TKTP.

In sum, integrating these theoretical perspectives paints a more comprehensive picture of expertise development and tacit knowledge transfer within football coaching. They serve as frameworks for understanding and addressing the challenges associated with these processes, shaping the trajectory of this inquiry.

This exploration is integral to the broader goals of this research, contributing to a deeper understanding of the pathways for enhancing coaching expertise and effectively managing tacit

knowledge within the realm of football coaching. As such, these theoretical underpinnings provide a strong foundation for the empirical investigations that will follow in the subsequent sections of this research. These investigations will contribute to the development of more effective strategies and interventions for the professional development of football coaches, ultimately benefiting the overall quality and success of the sport while providing new potential insights to inform MCT development writ large.

This research's insights into coaching expertise and tacit knowledge transfer extend to the broader context of higher education. Enhanced coaching methodologies in football not only improve athletic performance but also support the holistic development of student-athletes, aligning with universities' educational missions. This intersection of athletic and academic objectives underscores sports' role in shaping the institutional identity and culture of universities, influencing policies and practices that contribute to the overall educational and developmental goals.

Chapter 3 - Methods

Introduction

In this study, I examined the development of expertise among college football coaches as members of mission critical teams (MCTs) (Cline, 2017). Specifically, I sought to gain insights into the experiences and perspectives of head football coaches as they oversee and facilitate a situated learning environment (Lave & Wenger, 1991) and a community of practice (Wenger, 1998) where coaches move from novice towards expertise within their roles. Ultimately, these findings contribute to the broader understanding of how MCTs can more effectively train and educate members.

Research Questions

1. How do football coaches conceptualize expertise?
2. How do football coaches develop expertise?
3. What role does situated learning play in the expertise development of football coaches?
4. How is tacit knowledge transferred among football coaches?
    a. Where do challenges and barriers exist in this transfer process?

Design of Study

In conducting this study, I used the constructivist paradigm as my critical lens. The constructivist paradigm assumes that knowledge and reality are socially constructed by individuals as they interact with their environment (Mertens, 2019). This perspective aligns with the focus on situated learning environments and communities of practice within college football coaching, as these concepts emphasize the importance of social interactions, shared experiences, and collective knowledge-building in the development of expertise (Lave & Wenger, 1991; Wenger, 1998). By adopting the constructivist paradigm, I acknowledged the multiple realities

and interpretations of coaching expertise development, and I sought to understand these varied perspectives through the analysis of the participants' lived experiences and narratives.

Qualitative research was the most appropriate approach for this study. Qualitative research allows for a deeper exploration of the nuances and complexities of the coaching experiences and can capture the multifaceted nature of expertise development (Creswell & Poth, 2016). Furthermore, qualitative research enabled me, as the researcher, to consider my positionality and the influence it has on the research process (Creswell & Poth, 2016), which is particularly relevant in this study due to my personal experiences and connections with the coaching profession.

I chose the phenomenological research design as it is suitable for studying lived experiences of a particular phenomenon (Moustakas, 1994), in this case, the development of expertise in football coaching. This research design enabled me to obtain a deep understanding of the lived experiences of head coaches and how they understand the development of expertise, as well as the factors that contribute to this development. I chose this design because it allows for a thorough examination of the experiences and perspectives of head coaches and provides rich, contextual data to inform the understanding of coaching expertise development (Creswell & Poth, 2016).

Sampling

This study aimed to investigate the development of expertise in the context of Division I college football coaching. Therefore, the sample consisted of current and former head coaches of Division I college football teams. The selection of participants was purposive, reflecting the need for a specific group of individuals who can provide rich, relevant, and diverse data pertinent to the research questions (Palinkas et al., 2015).

There was no predetermined minimum level of coaching experience required for inclusion in the study. The intent was to capture a broad spectrum of coaching experiences, from novice head coaches to seasoned veterans. This approach aligned with the principles of maximal variation sampling, allowing for a richer understanding of the phenomena under study (Patton, 2014).

The sample included coaches from various levels of success, ranging from those who have achieved consistent success to those who have faced significant challenges. This approach recognized that different experiences could provide a more comprehensive understanding of the coaching expertise development process.

The inclusion of both current and former coaches is designed to provide a more complete picture of the development of coaching expertise. Current coaches can offer insights into the contemporary challenges and dynamics of the profession, while former coaches can provide reflective perspectives. These varied perspectives can highlight how the nature of coaching and expertise development has evolved over time and may illuminate fundamental truths across eras. Furthermore, as coaches are connected through coaching trees (Elliott et al., 2014; Fast & Jensen, 2006; McCullick et al., 2016; Rockhill, 2020), experience across eras may be especially relevant to understanding the TKTP.

While the study did not place explicit focus on geographical locations, the sample encompassed coaches from various parts of the country. Similarly, although the study did not focus specifically on gender or ethnicity, it acknowledged the potential impact of these factors on the development of coaching expertise and was committed to respecting and representing diversity within the confines of the sample.

Participant recruitment was conducted through professional networks and utilized a snowball sampling approach, in which initial participants are asked to recommend other potential participants who meet the study's criteria (Noy, 2008). This method is intended to maximize the range and depth of the experiences included in the study.

Finally, in keeping with the principles of qualitative research, the size of the sample started with a minimum of ten and the maximum was not predetermined. Instead, it was guided by the principle of saturation, whereby data collection continued until no new themes or insights emerged from additional interviews (Guest et al., 2006).

Instrumentation

The primary instrument for data collection in this study was a semi-structured interview protocol (DiCicco-Bloom & Crabtree, 2006). This protocol (see Appendix A) was carefully developed based on the research questions and a thorough review of the existing literature on coaching expertise, situated learning environments, and communities of practice.

The semi-structured interview protocol was designed to elicit detailed and in-depth responses from participants about their experiences and perspectives related to expertise development within the context of college football coaching. The protocol consisted of open-ended questions that allow participants to share their understanding of their role as members of MCTs, how they conceptualize and develop expertise, ways in which tacit knowledge transfer takes place, and the role that situated learning plays in their development.

To enhance the trustworthiness and credibility of the data collected using the semi-structured interview protocol, several strategies were employed. These included member checking (Lincoln & Guba, 1985), in which participants are given the opportunity to review and verify the accuracy of their data through a follow-up interview or email exchange. In addition, I

conducted triangulation of data sources (Lincoln & Guba, 1985), whereby data are compared and contrasted across different sources and participants to provide a more comprehensive and nuanced understanding of the phenomenon under study.

Data Collection

The data collection process for this study involved conducting semi-structured interviews with Division I college football head coaches who met the study's sampling criteria. These interviews were conducted in-person, over the phone, or through online video conferencing platforms, depending on the preference and availability of the participant.

Before each interview, I provided the participant with an informed consent form that outlines the study's purpose, the participant's role, their rights to withdraw from the study at any time, and the measures taken to ensure their confidentiality (World Medical Association, 2013). I also verbally explained these points to the participants to ensure their understanding and answer any questions they might have.

Potential participants were initially contacted via email or telephone. The initial communication introduced myself as the researcher, explained the purpose of the study, and requested the individual's participation. If I had direct contact with potential participants, they were approached in person.

Once a participant has agreed to participate, I arranged a suitable time and place for the interview that accommodated the participant's schedule. This process first considered the feasibility of an in-person interview. If that is not possible, I attempted to schedule a video conference interview. As a last resort, the interview was conducted over the phone.

All interviews were audio recorded with the participant's permission to ensure an accurate representation of their responses (Oliver et al., 2005). Field notes were also taken during

the interviews to capture contextual information, non-verbal cues, and other relevant observations (Emerson et al., 2011).

Confidentiality was of utmost importance in this research. Therefore, pseudonyms were used in place of participants' real names to protect their identities. Any information that may reveal the identity of the participants was omitted or altered in the research report. Following each interview, the audio recordings were transcribed verbatim and stored securely for analysis (Oliver et al., 2005). The transcriptions served as the primary data for subsequent analysis.

Data Analysis

I used a six-phase process for thematic analysis ((1) becoming familiar with the data, (2) generating codes, (3) generating themes, (4) reviewing themes, (5) defining and naming themes, and (6) locating exemplars) to analyze the data obtained from the semi-structured interviews (Braun & Clarke, 2006). Thematic analysis was chosen for this study because it provides a flexible and useful research tool, which can provide a rich and detailed, yet complex account of data. It is particularly useful for exploring perspectives of different research participants, highlighting similarities and differences, and generating unanticipated insights (Braun & Clarke, 2006). This thematic analysis took an inductive approach where coding was done without trying to fit it into a pre-structured coding framework (Braun & Clarke, 2006). I developed codes and categories based on the data and compared and contrasted them to existing literature while revising them as necessary throughout the analysis process (Miles & Huberman, 1994). I used a software program, Dedoose, to assist in the management of data.

To ensure the validity and reliability of findings, I triangulated data by comparing and contrasting it across different sources and participants (Creswell & Poth, 2016). I also sought

member checking, where participants reviewed and verified the accuracy of their data through a follow-up interview or email exchange (Creswell & Poth, 2016).

To ensure the quality of the data, I used strategies such as reflexivity, peer debriefing, and an audit trail. Reflexivity involved reflecting on the impact of my background and biases on the research process and findings (Finlay, 2002). Peer debriefing involved seeking feedback from other experts in the field to validate the coding and interpretation of data (Lincoln & Guba, 1985). I maintained an audit trail, including documentation of decisions and procedures made throughout the research process to ensure transparency and replicability of the study (Lincoln & Guba, 1985). Additionally, analytic memos (Lincoln & Guba, 1985) were kept throughout the process documenting ideas and thoughts that come up in real time.

Findings

I presented the findings in a narrative format, using thick and rich descriptions, quotes, and examples to illustrate key themes and patterns. Thick and rich descriptions provide detailed and nuanced accounts of participants' experiences and perspectives, allowing for a deep understanding of the phenomenon under study (Geertz, 1973). I discussed the results of the study in the context of the existing literature and identified implications for practice and future research (Creswell & Poth, 2016).

Ethics, Trustworthiness, and Credibility

I addressed ethical considerations by obtaining informed consent from participants, maintaining participant confidentiality, and ensuring that the study complies with relevant ethical guidelines and regulations (World Medical Association, 2013). I addressed researcher bias by reflecting on the impact of my background and biases on the research process and findings (Finlay, 2002). To establish trustworthiness and credibility, I conducted member checking and

peer debriefing (Lincoln & Guba, 1985). Trustworthiness was addressed through multiple methods, including triangulation, member checking, peer debriefing, and maintaining an audit trail (Lincoln & Guba, 1985).

Positionality Statement

As a researcher, I acknowledge the significance of declaring my positionality and personal biases in the research process. My personal and professional journey is intimately connected to college football coaching, and these experiences have profoundly shaped my research interests and perspectives.

Being the son of a long-time college football coach, I had a front-row seat to the highs and lows associated with success and failure in this profession, both at the family and organizational levels. I experienced the discomfort of seeing my father, a figure of deep admiration for me, have to transition out of his role as a head coach at a Division I institution. This pivotal moment ignited my curiosity to understand why some coaches make it and others do not, and how the most successful navigate through uncertainty.

Seeking answers to these questions, in part, led me to become a college football player at a Division I institution, where I witnessed another coaching transition and took part in the subsequent rebuilding process under a new head coach. Further enhancing my insight, I had the opportunity to play professional football, immersing myself in the field even deeper.

After retiring from professional football, I transitioned back into the higher education landscape, becoming a graduate assistant football coach while embarking on my doctoral research journey as a practitioner scholar. Through these diverse experiences, I have witnessed numerous coaching transitions and observed firsthand the challenges met by veteran, novice, and intermediate head coaches.

My research focus on expertise development among college football coaches is driven by a desire to contribute to the coaching profession and support the development of coaches, a group of individuals who have had a profound impact on my life. I was inspired by Preston Cline's work on Mission Critical Teams (MCTs) and the relevance of this concept to the world of college football coaching. My objective is to contribute to the leadership of college football programs by distilling and communicating the foundational elements of coaching expertise development, ultimately enhancing the professional experiences of coaches and the young men they mentor.

Given my positionality within the college football community, I acknowledge that my background, experiences, and personal connections might influence the data collection, analysis, and interpretation processes. I am cognizant that my preconceptions and biases may have shaped the way I approached data collection, including the interview process and the questions I asked. Similarly, my personal experiences may have also influenced the way I interpreted and analyzed the data, potentially leading me to emphasize certain themes or perspectives over others.

To address these potential biases, I practiced reflexivity throughout the research process, critically examining my assumptions, biases, and the influence of my positionality on the study (Finlay, 2002). Additionally, I used strategies such as peer debriefing and member checking (Lincoln & Guba, 1985) to ensure the trustworthiness and rigor of the study.

It is my belief that my unique insight and understanding of the world of college football coaching, gleaned from my personal and professional experiences, provided a more nuanced understanding of the intricacies and complexities of the coaching profession. This deep familiarity with the context and culture of college football also fostered rapport with participants, encouraging them to share more openly and honestly about their experiences. I view this intimate

knowledge not as a hindrance, but as a powerful tool that enriched this research and contributed to a more comprehensive understanding of coaching expertise and the effective navigation of uncertainty within the context of MCTs.

Limitations and Delimitations

Like all research, this study possesses certain limitations and delimitations. Limitations refer to potential weaknesses or factors that the researcher cannot control, while delimitations are boundaries that allow the researcher to define the scope of the study (Simon & Goes, 2013).

Potential limitations of this study could include the study's dependence on self-reported data from participants, recall bias (Schwarz & Oyserman, 2001) and social desirability bias (Fisher, 1993).

Delimitations of this study included the specific focus on head coaches of Division I college football programs within the United States. This focus was chosen due to the unique context and dynamics of these programs and my familiarity and experience in this area.

Furthermore, the study specifically investigates expertise development in the context of Mission Critical Teams (MCTs) within college football coaching communities of practice. Although this narrow focus allowed for a deeper understanding of this specific area, it may have limited the applicability of the findings to other types of teams or organizations that do not share the same characteristics and complexities of MCTs.

Additionally, this study implicitly prioritizes the development of coaching expertise over direct measures of student-athlete development. While the professional growth of coaches is undeniably critical to the success of collegiate sports programs, this focus may inadvertently narrow the definition of 'success' to primarily encompass wins and losses. Such an approach risks oversimplifying the multifaceted role of head coaches in fostering student-athlete development,

leadership, and academic achievement alongside athletic excellence. It is important to acknowledge that the scope of this research does not extensively explore the direct impacts of coaching strategies on the holistic development of student-athletes, including their personal, academic, and athletic growth. This limitation is particularly relevant given the broader educational missions of collegiate athletics programs, which emphasize student-athlete welfare and development as central to their objectives. The reliance on self-reported data and the specific focus on Division I college football programs further delimit the study's exploration of success to a context where competitive outcomes often overshadow broader developmental goals. Future research could beneficially expand on this study by explicitly investigating the relationship between coaching expertise development and the comprehensive success of student-athletes, thereby offering a more rounded perspective on the contributions of collegiate head coaches to both competitive and educational outcomes within the unique dynamics of these Mission Critical Teams.

By clearly stating these limitations and delimitations, I aim to provide transparency about the scope and potential applicability of this study's findings. The goal is to contribute valuable insights into coaching expertise development within the specific context of Division I college football head coaches and MCTs.

Chapter 4 - Findings

Introduction

The progression from player to coach in Division I FBS college football unveils a compelling evolution, often navigating an indigenous journey (Dunn & Dunn, 1997; Tracy et al., 2018) that embodies more than the acquisition of technical skills. This transition illustrates a form of situated learning, where norms and values are absorbed through experience and interactions with other coaches (Cushion et al., 2010). The present study dives into these intricate trajectories, exploring how coaches acquire, adapt, and circulate foundational, yet often unarticulated, knowledge as expertise through the lens of situated learning (Lave & Wenger, 1991).

While the Tacit Knowledge Transfer Problem (TKTP) highlights substantial challenges in cultivating expertise (Nash & Collins, 2006; Polanyi, 1966), the essence of this research is firmly anchored in understanding the indigenous and informal processes vital for nurturing coaching expertise. This endeavor aims to facilitate and improve existing coaching development processes, as these native environments typically mirror the true dynamics of coaching more authentically than formalized programs (Cushion et al., 2010). College football coaching, where strategic management of varied aspects is crucial for both short-term wins and enduring successes, offers a rich environment to investigate and explore these developmental paths and knowledge-sharing processes within the coaching realm.

The following research questions drove this research:

1. How do football coaches conceptualize expertise?
2. How do football coaches develop expertise?
3. What role does situated learning play in the expertise development of football coaches?

4. How is tacit knowledge transferred among football coaches?
    a. Where do challenges and barriers exist in this transfer process?

Anchored in a constructivist paradigm, this investigation utilized a qualitative, phenomenological research approach to deeply comprehend the lived experiences of Division I college football head coaches (Mertens, 2019; Moustakas, 1994). Employing purposive and snowball sampling, interviews were conducted with both current and former coaches, spanning diverse experiences, until data saturation was achieved (Palinkas et al., 2015; Guest et al., 2006). Semi-structured interviews, facilitated through various mediums, adhered strictly to confidentiality and ethical research norms (DiCicco-Bloom & Crabtree, 2006; Oliver et al., 2005; World Medical Association, 2013).

Data were scrutinized through a six-phase thematic analysis (Braun & Clarke, 2006), using Dedoose software to bolster structured and thorough data management and analysis. The validity and reliability of the findings were fortified through triangulation and member checking, ensuring a rigorous and accurate interpretation of the data (Creswell & Poth, 2016; Lincoln & Guba, 1985).

Profile of Participants

The participants of this study included 27 current and former Division I head football coaches. These participants collectively represent an extraordinary wealth of experience and success in collegiate football. Together, from an accolade standpoint, they have amassed:

- As Head Coach:
    - 5 National Championships
    - 42 Conference Championships across multiple leagues including the ACC, Big Ten, and SEC among others

- 60+ Coach of the Year awards, conferred by various organizations including the AFCA, ACC, Big Ten, and SEC among others
- Numerous nationally recognized coaching accolades such as the Amos Alonzo Stagg Award, Broyles Award, George Munger Award, and Paul 'Bear' Bryant Award
- 4 participants have been inducted into the College Football Hall of Fame

The breadth of these accolades indicates a consistent level of high achievement within the participant group. Additionally, some coaches have distinguished themselves by setting records for their respective programs or across NCAA college football, while multiple others became the youngest head coaches in Division I at the time of their hiring.

Despite these remarkable achievements by members of the sample, the journey of these coaches has not been without its challenges. Many, including those highly decorated, shared candid reflections on obstacles they've faced, such as failures, losing seasons, and instances of losing positions. These setbacks have been integral to their development, offering invaluable insights into the complexities of coaching at the collegiate level. Importantly, an analysis of their career records reveals an overall average win percentage of.500. This figure is not just a statistic but a testament to the balanced mix of success and adversity experienced by the participants, enhancing the credibility of the study's insights into the nuanced realities of collegiate football coaching. Moreover, the average .500 win rate across this diverse group of 27 coaches underscores the representativeness of the sample and confirms its adequacy for capturing the wide-ranging experiences and inherent challenges within the profession. Thus, the findings from this study are positioned to offer a realistic cross-section of the peaks and valleys of coaching development across varied levels of success.

Within the participant population, the range and depth of overall coaching experience vary significantly, illustrating a rich tapestry of commitment and expertise in collegiate football. At one end of the spectrum lies the most seasoned veteran, with a career spanning an impressive 47 years, embodying endurance and adaptability within the sport. In contrast, the least experienced coach, with 11 years in the field, represents the newer approaches and perspectives in coaching.

The average overall coaching tenure among participants stands at 36 years, highlighting a substantial dedication to collegiate football. This is further demonstrated by the median and mode of experience, both at 38 years, indicating a central tendency in the group towards long-term engagement in coaching.

In terms of their roles as Division I head coaches, the average tenure was 14.11 years, with the longest-serving coach having been in the position for 31 years, and the shortest tenure being just 2 years. The most common duration in this role, as indicated by the mode, was 4 years, while the median tenure was 15 years. This data underscores the varied lengths of service and experiences within this elite group of coaches.

Focusing on the journey to becoming Division I head coaches reveals a path marked by resilience and gradual advancement. On average, coaches spent 16.41 years developing their expertise at various levels before assuming the role of a DI head coach for the first time, with the median and mode of this progression being 16 and 18 years, respectively. Despite this central clustering, the range of experiences varies considerably, extending from a rapid 4-year rise to a more prolonged journey of 37 years. These statistics not only highlight the diverse routes to leadership in collegiate football but also emphasize the blend of both rapid and steady progression in coaching careers.

This broad spectrum of experiences within the participant group offers invaluable insights into the complex roles and challenges of leading college football programs and aligns with the methodological approach of maximal variation sampling as outlined in the methods chapter. It underscores the varied paths to the pinnacle of leadership in this competitive arena, reflecting a combination of enduring commitment and the ability to adapt, which characterizes the journey of a collegiate football coach.

Use of Pseudonyms

This chapter presents the experiences of the 27 Division I head football coaches profiled above, with pseudonyms used to ensure confidentiality. This approach aligns with ethical research standards and allows for candid sharing of insights while protecting participant identities. The narratives, though anonymized, are authentic reflections of the coaches' lived experiences, contributing significantly to the understanding of coaching expertise development in collegiate football.

Overview of Emerging Themes

This chapter aims to unveil the research findings derived from in-depth interviews with current and former Division I head football coaches. The analysis of the data led to the emergence of four significant themes: Authenticity, Markers of Expertise, Development Mechanisms, and Reflection. Furthermore, some themes harbored underlying sub-themes, illustrating the depth and nuances of coaching progression.

Navigating these findings and themes, readers will observe the foundational role of authenticity and the bridging role of reflection in coaching. Authenticity in coaching not only reflects a coach's true character, but also significantly influences markers of their expertise and mechanisms of their development; it shapes how they learn, teach, and evolve in their profession,

ensuring that their growth aligns with their genuine self and values. Moreover, reflection emerges not as a mere endpoint to coaching expertise development, but as a bridge that leads back to the essence of authenticity.

Authenticity

At the heart of coaching lies a genuine connection with oneself, with players, and with the game. Authenticity, thus, emerges as a pivotal cornerstone from the data collected. While participants of this study pointed out that there are many ways to express coaching expertise, as will be discussed later in this chapter, authenticity stands out as foundational. Without authenticity, the other markers of expertise lose significance. This theme reveals that while possessing markers of expertise is valuable, such markers must resonate with a coach's authentic self in order to be truly effective. This exploration of authenticity delineates its significance as a personal expression, underscores its indispensable role in establishing genuine connections with others, and examines the repercussions of its absence. With stark clarity, Michael Price encapsulated this idea, stating, “Of the things that I learned, one was you got to be yourself.” This is not a standalone revelation; it is a sentiment that reverberates across the participants’ voices.

Drawing from his many experiences in coaching, Andrew Grant offered deeper introspection, in which he portrayed coaching as an avenue for genuine self-expression. He mused, “So first, coaching, football, being involved in sports... enabled me to be who I am. I think I probably could have used parts of who I am, how I was wired from the start, that would allow me to do other things. But there would be parts of me, if I was doing other things, they'd just be sitting over here in hibernation.” For Coach Grant, coaching is not merely a profession, it is an embodiment of his true character. Even though he no longer actively coaches, Coach Grant

elaborated on his commitment to this ethos. For instance, when people ask him whether he is retired, his answer is, “No. I just don't have a job. I'm still me. I'm never going to retire from being me...What am I good at? Competition, teaching leadership, helping guys who want to be the best they can be.”

James Griffin further emphasized the importance of authenticity in the approach to coaching. He advised fellow coaches: “Don’t try to be somebody else as far as the way you coach…you need to be you.” Similarly, this sentiment also resonates with Kelvin Harris’s beliefs. Coach Harris further drove home this value of authenticity, as he asserted, “Be yourself. They hired you for who you are... You can learn all the other things, but don't try to be somebody you're not.” Coach Harris suggested that while one can acquire new knowledge and skills, the essence of who someone is—their authenticity—cannot be replaced or replicated. These varying perspectives emphasize that authenticity is not merely a desirable trait but may be a critical job requirement; each coach, though echoing the theme, provided a unique lens, highlighting the multifaceted nature of authenticity in coaching.

Authenticity, however, extended beyond the individual-level for coaches. For instance, Ethan Coleman, in his reflection, underscored the importance of authenticity in the service of genuine connections. He highlighted the fact that, “Kids can sense when someone is fake…You've got to be true to your own personality.” This thought served as an example of the broader insights that Isaac Carter offered emphasizing authentic relationships further: “The number one thing I think is most important to human beings is authenticity. If you're not authentic... everybody figures it out. Humans figure it out.” In such a people-centric business, the bonds forged are anchored in trust, where authenticity remains the keystone of this trust.

Coaches in the study also pointed out the pitfalls of pretense. David Ryan painted a picture of the repercussions of forgoing authenticity, cautioning, “Being somebody you’re not is exhaustive. And if your staff and players don’t think you’re genuine, you’ve got no shot.” Paul Warren, who candidly spoke of the emotional toll of pretense, mirrored this sentiment, admitting, “Pretending to be someone else... takes a lot of time, energy, and effort. It hurts your spirit.” These perspectives reveal that insincerity not only undermines a coach's credibility, but also exacts an emotional toll on that coach; such an effect emphasizes the importance of authentic and genuine engagement in the coaching profession.

The insights, though varied, converged on one fundamental truth–authenticity is the core element. Reggie Joseph aptly summarized that with everything that goes into being a good coach, “Ultimately, you still got to do it your way… there’s so much personality involved in it.” The world of coaching is enriched not just by strategies and skills, but by the authentic souls and personalities who breathe life into it. As such, authenticity emerged not as a singular concept, but assumed specific roles within the coaching spectrum, shaping connections, guiding personal growth, and influencing team dynamics, as the diverse voices of the participants underlined. Thus, as the following sections explore, authenticity functions not only as a personal virtue, but as a professional bedrock upon which coaches build their expertise and shape their practice as well.

Markers of Expertise

Markers of Expertise primarily revolve around the ways coaches exhibit or perceive expertise. In the realm of football coaching, a singular metric, static benchmark, or set prescription cannot define expertise. Expertise instead, in the context of coaching, serves as a nuanced exhibition of practices, beliefs, and behaviors, which the foundation of authenticity

underscores. As the participants of this study discussed, the theme of Markers of Expertise diverges into three sub-themes: Good Teacher, Learner, and Clichés. Each sub-theme provides a distinct perspective, shedding light on the diverse aspects of coaching expertise, as the narratives and experiences of the participants reflect.

Good Teacher

In football coaching, expertise requires a delicate equilibrium between content mastery and pedagogical prowess that coaches achieve through relationships and communication. Genuine authenticity further marks this equilibrium. Participants of this study overwhelmingly identified their role as an effective educator as a hallmark of expert coaching. When asked what makes an expert coach, Reggie Joseph did not hesitate and directly stated that:

> Coaching is teaching…you have to understand what you're trying to do. You're trying to improve people by teaching them. And it just happens to be that it's athletics or in this case, football. You're trying to improve them, make them better…You have to be able to instill that in your pupils, or the players, that you're there to help them get better. That's your main job. To help them get better. And if individuals get better, the team gets better.

Samuel Fletcher echoed this sentiment when he opined, "I think what a really good coach is, number one, you're a good teacher." David Ryan also talked about coaching as teaching and stated that "one thing about coaching is that you're primarily a teacher" and that in this teaching role, a coach's job is to "educate somebody as to how to do their job well."

In this study, coaches identified expertise as a blend of content mastery and pedagogical ability. Some coaches emphasized that the foundation of teaching was the content-mastery itself. As Reggie Joseph put it:

> You have to have a complete knowledge of your discipline, whatever you're going to be coaching…You have to be knowledgeable and thorough in it…You have to be proficient in it and you have to know your discipline because in order to teach it, you have to know it.

Shifting the focus from coaches to players, Nathan Ellis discussed the impact of content mastery, noting as an educator:

> You've got to be able to instill confidence in a player that that player knows that, 'hey, this guy really knows his stuff and if I just do what he tells me to do, then I'm going to be able to be a better player, achieve success, and be a good teammate and help our team be successful.'

While content mastery is indispensable for instilling confidence and credibility, it represents just one facet of the diverse skill set that constitutes a good teacher in the realm of coaching.

Ethan Coleman highlighted a level of balance between pedagogy and content mastery, stating that:

> The players are only going to be receptive to [you] if they first think that you know what you're talking about…if you're a football coach, if you don't have a technical expertise, you're not going to have a receptive audience…Your technical knowledge, whether it be individual techniques [or] schematic stuff, to me becomes the vehicle or the vessel that you get to know them and develop a personal relationship and hopefully have an impact on their life.

Coach Coleman elaborated on this point by reemphasizing that:

> If you don't know what you're talking about, they're not going to listen to you…if you're a secondary coach and you don't know about secondary play, you're just another [guy]. They have enough friends. I've seen a lot of great people who generally care about kids, but they don't have a technical expertise. They think just being a good guy is enough…those coaches have a hard time developing relationships because the players don't believe that the coach can make them better.

Coach Coleman revealed that while ultimately, as a teacher, the goal might be to build relationships with players, the technical knowledge needed to help them improve their craft is a starting point for this relationship development.

While most coaches considered technical knowledge or content mastery essential for effective teaching, on the pedagogical side, coaches such as Samuel Fletcher believed that "above knowledge and everything else, if you don't have that ability to run a classroom and run a position group on a field, then you're going to struggle." Likewise, Isaac Carter believed that while "obviously there's the actual content and understanding of scheme, technique, things like that…I think a lot of guys do well in this business because of…having the ability to communicate with people." In essence, while profound knowledge of the game is indispensable, the ability to communicate and manage both in the classroom and on the field is equally pivotal to coaching success.

Other coaches believed that effective teaching hinged on the pedagogical ability to build relationships. Nathan Ellis made it clear that in order to help people grow and develop, as a teacher "you've got to have interest in people." Coach Joseph also talked about the relational side of being a good teacher when he said, "the most important relationship you have to have is with your students, your players." Regarding this relationship, he clarified that "It's not like

you're a player's coach, I don't like that term. You have to have total respect…but they have to also understand that you're not there to be their friend. You're there to get them better…and I always say, you have to be able to criticize without creating resentment."

Gilbert Tate neatly articulated this interplay when he shared his belief that "The most successful guys were the ones that combined both that good rapport with the players and also [were proficient] schematically. Those to me, were the ones that I thought were the best." The prevailing sentiment was that coaching expertise combines content mastery with a pedagogical rapport built through relationships with players.

Paul Warren reflected on the intricate balance of technical prowess and a commitment to the best teaching practices, while also connecting it back to the theme of genuine authenticity. To Coach Warren, "Technical prowess combined with the literature and the reading and the desire to really learn and have best practices of teaching—with the ability to then model—that was a powerful combination in terms of effectiveness." Moreover, he emphasized the foundational role of authenticity, asserting:

> Those three legs of the stool so to speak, ended up feeling right to me. That methodology ended up resonating and becoming an authentic way that suited me and that felt like I didn't have a mask on and I wasn't pretending. I was just authentically leading and trying to help people.

Ultimately, Parker Lambert provided the summative idea that the test of good teaching is manifested in the players doing their job well when he shared that "the age old adage is 'it's not what you know, it's what they know and it's ultimately what shows up on the film.'" Coach Lambert expands on this point by noting that "there's a level of mastery to what you do that it's taught in such a way that you're not trying to show them how brilliant you are, you're trying to

show them the way to become really good at what they do." Coach Lambert sums up that coaching expertise as an educator ultimately comes down to authenticity which was shown to be the foundation of coaching expertise. Regardless of the driving mechanism, be it technical proficiency or pedagogical skill, being a good teacher marks expertise in football coaching.

Learner

Transitioning from the concept of a 'Good Teacher' to that of a 'Learner' in coaching, the insights of Reggie Joseph offer a compelling link between these two markers of expertise. He captures the evolving nature of the coaching role, emphasizing the necessity of adaptability:

> Your discipline changes. There are different ways, there are different techniques to teach. There's different ways to get your message across. There's different ways to improve the individuals just like in a classroom. So there's different ways to teach math. There's different ways to teach science. There's different ways to teach linemen and you have to go out and improve yourself.

In emphasizing the importance of continual learning and evolution, Coach Joseph states:

> You never stop learning yourself. You're always trying to improve...You can't just become a dinosaur. You have to evolve with the young people that you're teaching…you're always trying to improve yourself and it's the competitive nature of sports. You're trying to improve your players, you're trying to make your team better so that you can defeat the other team, the other coach. It's a competition...It's a little bit different than teaching in a classroom because you're competing against other coaches and other teams. And in order to stay ahead of 'em or defeat them, you have to figure out different ways. You have to keep learning...it's the competitive nature of sports.

The intricacies of coaching do not end at mastering the teaching role. In fact, the game's dynamic nature dictates that coaches also wear the hat of perpetual students. The mark of a Learner as a proxy for coaching expertise emphasizes the ongoing learning, adaptability, and flexibility of expert coaches. Most coaches of this study illuminated that expert coaches, as perpetual scholars of their discipline, manifest an innate drive to learn and refine craft. This drive, rooted in authenticity, ultimately propels their continual and progressive improvement as they journey through their coaching development. This section illustrates the essence of a 'Learner' in coaching: navigating the rapidly evolving challenges, showcasing varied methods of adaptation, emphasizing the importance of lifelong learning, and providing guidance on cultivating a learner mindset.

Isaac Carter pointed out that in football “things change really fast.” Coach Carter further highlighted the difference between experts and novices when he said, “I think some people can adapt to that stuff, some people can't.” This idea of adapting to change was reiterated by other coaches like Michael Price who said, “you got to be able to adapt.” Nathan Ellis said the same thing, differently, when he noted that “you got to be able to be flexible” and that as a coach you have to “expect the unexpected.” Ethan Coleman stated that “the key in coaching is you’ve got to constantly change [and] evolve…it’s not a static profession [and] it’s not a static game.” Aaron Monroe revealed that he believes “the quality of really good football coaches are the guys that can adapt to all these changes because they happen so fast and they are so fluid.” Lucas McKenzie summed up these sentiments when he was asked what makes an expert coach and responded that an expert coach is “flexible” and that “being flexible is not a sign of weakness, it's a sign of strength.”

For the coaches in this study, this learning, flexibility, and adaptability manifested itself in different ways. For some, this learning was more focused on developing specialized knowledge. For instance, from Coach Price' perspective:

> Probably the thing that we seek most as coaches is just knowledge of our area. So, we are constantly looking for ways to absorb knowledge in the specific area, because coaching each position is different, each side of the ball is different. I mean, there's different techniques, there's different tactics, there's different levels of expertise that you can elevate to. So, I think as a coach, the first thing is just knowledge, just the acquisition of knowledge.

Coach Price is talking about coaches learning the ins and outs of various coaching disciplines within the game. From Coach Lambert's perspective this learning was the result of:

> A passion for everything that went into the game, from logistics to team dynamics to the relationships within every level of the organization, the schematics, the techniques. I was just passionate about all of it and always had a burning desire to learn more about it and to get better at it.

Like Coach Price, Coach Lambert pointed out that "it's more being learned in [a] specific area of coaching and continually looking for different ways to do it." Ethan Coleman also concurred, stating, "I don't think the learning process ever ends."

For others, learning and adaptability had to do with schematics, dealing with players, or general approach to coaching. Aaron Monroe pointed to "really successful coaches, Nick Saban, Bill Belichick, these guys have been able to win in all sorts of different ways X's and O's wise…because they're willing to adapt" he emphasized that in his opinion "that's why there's so few successful coaches like Belichick and Saban…those guys are elite at doing that, being

adaptable and willing to change." Gilbert Tate emphasized learning and adapting strategy based on players when he said:

> It's what they say about putting a square peg in a round hole. Sometimes you can't force it in. So you either change the peg or make the hole different. That's a big part of coaching to me, is recognizing what kind of personnel you have and trying to adjust what you do with that personnel.

Isaac Carter talked about being a learner regarding a general coaching approach. Coach Carter cautioned that coaches should learn and not "let whatever the previous circumstance was, dictate how you do your job." He emphasized not falling into the trap of "this is how we've done things in the past here on staff, so I'm just going to keep doing it that way" he pointed out that "every year it's a different team, so it doesn't matter what happened the year before" indicating that coaches need to continually learn and adapt to new situations.

David Ryan emphasized the importance of learning when he advised that "you got to be willing to keep your ears open and your mouth shut…especially as a young coach…the goal is to obviously learn as much as you can from the people that have been doing it longer than you have." Stephen McDonald echoed a similar sentiment when he stated:

> Don't always think you got all the answers. That was a big lesson, especially for young coaches because there's a lot of different ways to coach the same position and even coach the same play or same scheme. And then I think if you can learn as a young coach that learning is a lifelong process, you've learned a lot. I've been around a lot of young coaches, they got it all figured out. There's no more answers.

Coach McDonald is talking about approaching learning with a beginner's mind and fighting to not be closed off to other ways of doing things because you think that you already know it.

Finally, Aaron Monroe emphasized that coaches need to take ownership of their own learning when he said:

> Educate yourself. And to me, the best way you can educate yourself as a coach, because again…there's no classroom for this. There's nobody that's going to teach you how to be a head football coach or even an assistant coach. Reach out to other coaches and gain from their experiences, whether they're older guys that are retired or the guys that are still coaching now, just friends of yours, whatever. But find people that are in similar situations and ask questions and you can avoid a lot of problems.

Aaron Monroe's emphasis on knowledge-seeking and peer learning paves the way for a deeper exploration of the structured and informal coaching development mechanisms, to be addressed later in this chapter. These mechanisms not only facilitate the continuous evolution of a coach's expertise, but also reinforce the collaborative nature of learning within the coaching community.

In the ever-changing world of coaching, part of true expertise is expressed in not just knowing the game, but perpetually re-learning it. Exceptional coaches are those who continuously evolve, embracing the humility to learn from others.

Clichés

Aside from being a Good Teacher and a Learner, the data revealed a variety of other markers that define coaching expertise, these certain principles emerged across the narratives:

- Ambitious
- Competitive
- Detail-Oriented
- Focused on the Present
- Hard Working

- Honest
- Indispensable
- Loyal
- Organized
- Recruiting Ability
- Team Player

These characteristics, although they could be seen as ‘clichés’, are far from trivial. They represent deeply held convictions that the coaches in this study view as central to their profession. Looking at a few of the elements captured in the data, such as being "Ambitious," "Detail-Oriented," and “Hard Working,” one might be tempted to dismiss them as mere buzzwords. However, upon closer reflection, it becomes evident that these are not just words. They are the fabric of a coaching philosophy, the unwritten rules that guide actions, and the values that anchor decisions. Although these principles may seem generic or cliché, their weight in the coaching world lies in the theme of Authenticity.

Each coach, in their journey, discovers certain truths about the profession, certain practices, or beliefs that resonate deeply with their personal ethos. And it is here that the intersection between these foundational principles and authenticity becomes most profound. When a coach talks about the importance of "Honesty" or the value of being a "Team Player," they are not just regurgitating common knowledge. They are sharing a part of their authentic self – a belief or practice that aligns with their intrinsic understanding of coaching expertise.

As highlighted in the discussions on authenticity, coaches believe in the perils of pretense. Adopting a principle or practice that does not resonate authentically can be draining and counterproductive. Hence, while the principles outlined might seem universal, their true

power lies in how authentically a coach integrates them into their practice. They are not just markers of expertise, but if a coach chooses to adopt them they become reflections of a coach's authentic self-expression.

In the vast mosaic of coaching expertise, these principles, combined with unique individual insights, form the pieces that, when authentically embraced, create a holistic picture of what it means to be a truly expert coach in the minds of the participants.

Ambitious and Loyal. The coaches' emphasis on being Ambitious speaks to the aspirational aspect of the profession, wherein they constantly strive for betterment, both for themselves and their teams. Nathan Ellis said it this way, “don't sit there and wait for something to happen. Go and make it happen. At least put yourself in the best situation you can to try to achieve things that you would like to achieve.” Mark Lane provided some strategies to show ambition when he advised that:

> Whatever responsibilities you're given, take and run with… If you don't have responsibility, then go up to the head coach or go and ask, ‘can you fill a role?’ Because then, not only will he see you as just being a football coach… it's going to show capability and want to.

Finally, Reggie Joseph talked about having a loyal intent behind ambition when he noted that “you gotta have the ambition…and melt that with the loyalty. You can’t have ambition where you’re cutting people’s hamstrings to get yourself ahead.” With regards to markers of coaching expertise, ambition and loyalty are intertwined. Ambition drives progress and loyalty ensures that this progress is ethically grounded and team-centered. This synergy underlines a coach’s journey towards excellence, balancing personal aspirations with a deep-rooted commitment to their team and ethical principles.

Competitive and Hard Working. In this study, the coaches' focus on Competitiveness and Hard Work echoes the rigorous demands and challenges inherent in Division I football, demanding not just talent but also relentless effort and a driving will to succeed. Regarding competitiveness as a coach, Gordon Bates made it clear that head coaches want to hire expert coaches that are "competitors. You want people who bring a fresh perspective and will fight for [their perspective] …If they're not fighting for it, then that's not the guy you want."

Michael Price and Barry Riley both commented on the role of hard work when asked about what makes an expert coach. Coach Price said it clearly that "you got to work hard." Coach Riley believes, about expertise, that "there's no shortcuts to it" and becoming an expert takes "hard work." This emphasis on competitiveness and hard work crystallizes an essence of Division I football coaching expertise: a blend of relentless ambition and tireless effort, essential for navigating the demanding and high-stakes environment of elite sports.

Indispensable, Organized, and Detail-Oriented. Coaches also highlighted the value of Indispensability**,** being Organized**,** and being Detail-Oriented, underscoring the importance of consistency and attention to minutiae in the coaching realm. Isaac Carter perceives a hallmark of an expert coach to be their indispensability, such that their absence significantly impacts the program. Expressing this idea, Coach Carter said, "Anytime you leave a place you want them to – It's messed up – but you want them to feel that it's like, 'wow, this guy was unbelievably valuable to our program and now we got a problem.'" To Coach Carter, this indispensability manifested in a mindset of "I'm going to do so much here that when I leave it's, like woah, that guy left." Thus, indispensability in coaching transcends mere presence, becoming a legacy of influence and impact that resonates after the coach has moved on.

Marcus Olsen, Marvin Wright, and Gilbert Tate all talked about the role of organization as a marker for expertise in coaching. Coach Olsen talked about organization regarding scheduling when he advised, “Don’t let the schedule run you. You run the schedule and I think that’s the best thing to do. The more organized you are…the better off you’ll be going forward as a football coach.” Coach Olsen also pointed out that as an expert coach “you have to be able to manage yourself, and that is you have to set aside time for all the other things outside of football.” He shared from his experience that “as I became better organized off the field, it gave me a better chance to be organized on the field.” Coach Wright talked about organization when it came to deciding how you want to structure professional development. He said to “Have a plan for what you’re going to do…it still comes down to this organization. Be organized. Be organized.” Lastly, Coach Tate noted that “good teams have highly organized practices. I think the coaches are very well organized, the staff is very well organized, and I think that's the ‘how’ part of [coaching expertise].” In the dynamic and often chaotic world of coaching, organization emerges not just as a skill but as a necessary compass, guiding coaches to manage their roles with clarity and efficiency.

Michael Price, Parker Lambert, and Reggie Joseph all mentioned being detail-oriented regarding coaching expertise. Coach Price was very clear when he said, “you need to be detail-oriented.” Likewise, Coach Joseph put it this way when talking about what coaching expertise looked like: “paying attention to details and not cutting corners.” Parker Lambert talked about why detail-orientation mattered when he pointed out that “everything matters and the minute you neglect something or don't have an appreciation for the attention to detail, that’s basically creating a chink in the armor and exposing…the team, the organization, and the program to potential failure.” Being detail-oriented is therefore not just about meticulousness; it's about

creating a culture of excellence where every minor aspect is acknowledged as a contributing factor to the team's overall performance and success.

Indispensability, organization, and a detail-oriented approach are not isolated virtues, but rather a synergistic triad. Together, they form a robust framework for coaching excellence, where hard work is channeled effectively, chaos is transformed into order, and the smallest details contribute to the grand strategy of team success.

Focused on the Present. Being Focused on the Present suggests an emphasis on immediate goals and tasks at hand, ensuring that while long-term objectives are crucial, the journey to achieve them is just as vital. Referring to one of the most renowned experts in football, Andrew Grant posed the question and then explained, "[Bill] Belichick, he's got six Super Bowls, right? Right now, Bill is not thinking about winning another Super Bowl. All he's thinking about is 'what do we have to do to beat Philadelphia?' He just wants to win another game." In a more personal trope, Paul Warren candidly talked about presence and his development of expertise when he said:

> I think almost anyone will feel this way if they're honest enough to say it. I was so overwhelmed with being a leader early on that it was just hard to keep up with. But, as success happened and things slowed down for me, my vision expanded outward more than inward.

Coach Warren's reflections reveal that with the growth of his expertise, he found himself more present in the moment. This heightened presence "slowed things down" for him, enabling a broader and more expansive view of the circumstances. Lastly, Aaron Monroe talked about focusing on the present regarding emotional regulation. Coach Monroe stated that "I learned to take my emotions out of coaching during the game…you've got to be able to shut all that stuff

out and just keep a strict focus on what you're doing." Coach Monroe talked about how this presence allows for more expert coaching when it came to game day decision making:

> When you get real emotional as a coach during a game, you stop thinking and you stop being able to make good decisions at stressful times like the fourth and twelve…that I was telling you about. That's a really stressful play call you've got to make out there. And if you're very emotional…it's real easy to make a mistake.

Focusing on the present in coaching has a dual essence: it demands concentrated effort on immediate objectives and disciplined emotional regulation, ensuring that coaches remain clear-headed and strategically sharp amid the game's high-pressure scenarios.

Honest and Team Player. Values such as Honesty and being a Team Player illuminate the moral dimension of coaching expertise, where ethical grounding plays a crucial role in establishing a coach's credibility and effectiveness. Regarding honesty, Marvin Wright made it clear that "You can't bullshit the student-athletes… they'll figure it out…you've got to be real with them… they may not like what they hear, but you have to be honest with them because [they] will appreciate that." Nathan Ellis also talked about the role of honesty as a marker of expert coaching when he said that:

> You have to be a coach that's an upfront and honest person… 'You might not like all the things that I have to tell you, but it's going to be the truth'... you've got to be somebody who can't be a bullshitter. You've got to be upfront and honest because I always felt that if I was going to get better or somebody that I was coaching was going to get better, they needed to hear the truth no matter if it was going to not be what they wanted to hear.

Gordon Bates summed up these sentiments about honesty more generally when he said that what makes a good coach is that "whatever you say you're going to do, you do." In essence, honesty

in coaching is not merely a virtue but a cornerstone of trust and improvement, fostering a transparent environment where both coach and athlete can grow in an atmosphere of unvarnished truth and mutual respect.

Coaches in this study also talked about how being a Team Player was an important facet of expert coaching. Michael Price minced no words when he said, “you’ve got to be selfless”. Nathan Ellis put it similarly when he made it clear that to be an expert coach “you’ve got to be a team player.” Marcus Olsen talked about what he was looking for when hiring expert coaches. He explained that he looked for coaches that “were team oriented” and that “weren’t ego people [who] understood that the team was better than themselves.” Samuel Fletcher also talked about what he was looking for when hiring expert coaches when he said, “the bottom line is you’ve got to have somebody that, at the end of the day, is not just agenda filled for their own wellbeing or selfish.” Coach Fletcher pointed out the impact that being a Team Player had through a story about being on a staff with Urban Meyer. As Coach Fletcher told it:

> Urban Meyer – who you can argue is a good coach, or was, in college football – and I would argue things out and we would decide whether we're going to run a seam or bend it into cover two. Or whatever we were going to do…I’ve never been around a guy like Urban…He could argue as fiercely as anyone and when he didn’t get his way and the two o’clock hour hit and we were going into position meetings, he was so thrilled about your idea as opposed to his. I mean, he was just the most team-oriented guy. ‘I think we should do it this way, but if we're going with that way, I'm going to coach the shit out of that and it's going to be the best thing we've ever done.’ And when you find that type of esprit de corps, whatever you want to call it, then you got a real chance.

Being a team player, as illustrated through these coaching narratives, goes beyond mere collaboration; it's about embodying selflessness, adaptability, and a commitment to collective success that elevates the entire team, reflecting a profound sense of unity and shared purpose in the pursuit of excellence.

Recruiting Ability. Finally, coaches in this study mentioned Recruiting Ability and the accompanying roster management highlighting an expert coach's role as both a leader and a manager. Isaac Carter posited that to be an expert coach "you've got to be able to evaluate and recruit." Coach Carter told a story of how right when he got his first head coaching job, he was talking to one of his mentors in the coaching profession and was told to "get off the phone with me and start recruiting." Coach Carter agreed with his mentor that recruiting is "what matters" and that "You need better players." This emphasis on recruiting suggests the importance of honest evaluations and authentic interactions with potential recruits. This honesty and authenticity are essential for not only identifying talent but also understanding how each player can contribute to and fit within the team's dynamic.

Samuel Fletcher's comments built on recruiting when he said that the mark of an expert coach is "not just acquiring a roster but keeping a roster. And it goes beyond just good players. You got to have the right, 'how does your roster match your scheme?' Some schools have 10 guys on scholarship at receiver, some schools have eight." Recruiting involves more than just gathering talented players; it requires an honest understanding of how each player fits into the team's scheme and an authentic approach to managing the roster. Some schools, as Coach Fletcher noted, may focus on certain positions more than others. This emphasis on recruiting suggests the importance of honest evaluations and authentic interactions with potential recruits. This honesty and authenticity are essential for not only identifying talent but also understanding

how each player can contribute to and fit within the team's dynamic. In the realm of expert coaching, recruiting transcends mere player acquisition; it embodies a strategic blend of talent evaluation, foresight in team composition, and ongoing roster management, integral to crafting a successful and cohesive team that aligns with the coach's vision and strategy. These facets, integral to crafting a successful and cohesive team, are subtly underpinned by a coach's ability to be both honest and authentic in their approach.

Summary. The terms often labeled as clichés in the context of coaching are much more than colloquial expressions; they encapsulate a collective understanding of professional excellence within the coaching community. They are the tacit representations that bridge the gap between conventional wisdom and the deeper, more nuanced layers of coaching expertise. Additionally, the overarching theme of Authenticity is central to this discourse. These clichés, in their essence, are not just skills or tools, but are foundational elements from which coaches carve out their authentic practices. They serve as reminders and guides, reinforcing the ideals that have been time-tested and validated through generations of coaching experiences.

In conclusion, the notion of an 'expert coach' may carry diverse interpretations, which individual beliefs, values, and practices that have persisted over time influence. While some might perceive these coaching principles as overused, within the domain of coaching expertise, they are acknowledged as enduring markers of a coach's journey towards authenticity and impact. This study's findings affirm that despite a broad spectrum of perspectives, the roles of 'educator' and 'learner' are consistently recognized as integral to the identity of an expert coach.

Development Mechanisms

The third prominent theme that surfaced from this study's data, following Authenticity and Markers of Expertise, is Development Mechanisms. This theme explores the ways in which

coaches continually expand their expertise. Recognizing that coaching expertise is not static, but an ever-evolving landscape, the Development Mechanisms theme probes the foundational drivers of a coach's professional growth. It encompasses two sub-themes: Environmentally Influenced Development and Self-Directed Learning.

Environmentally Influenced Development

The head coaches in this study heavily emphasized the pivotal role their working environment played in shaping and developing coaching expertise and team success. They delved into the intricate dynamics of their communities, discussing not only how they facilitated these dynamics, but also the various modes through which interactions occurred within their teams and broader coaching circles. Additionally, they discussed experience as one of the most important and influential ways that they developed expertise. This emphasis on experience indicates how real-world, practical encounters and challenges are integral to honing their skills and navigating the complex landscape of coaching. They also emphasized the proactive engagement in knowledge exchange, highlighting how active sharing and application of insights and strategies within their environments are essential for evolving their coaching methods and team dynamics.

Community Dynamics. As coaches delved into the intricacies of their coaching environment, they consistently highlighted the pivotal role community dynamics play in both coach development and the achievement of success. Their discussions often revolved around fostering a sense of belonging and shaping the structural framework of the community. Notably, these insights predominantly came from their vantage points as head coaches and leaders, focusing on what they perceived as effective for cultivating expertise from a community standpoint.

Sense of Community. In the domain of coaching, a sense of community is paramount for development, performance, and cohesion. The sense of community in coaching is deeply rooted in forging a family-like environment where trust, characterized by understanding and mutual respect, serves as the cornerstone and shapes the members' sense of community. What follows provides a clearer depiction of this dynamic as coaches shed light on the nuances of this trust, painting a picture of what a trusting sense of community embodies.

Michael Price provided a poignant analogy, likening a coaching community to a nuclear family by posing an open-ended question: “How does a child grow? [Coaching development is] that network of people around them that exchange information with them, challenging him to go seek information. So, I think that network… is [like] a nuclear family.” In a similar vein, Fredrick Dawson painted a picture of this community: “Coaching is somewhat of a big fraternity, but yet it's a small fraternity.” For Coach Dawson, this bond is about alignment in coaching philosophy, life values, and personality. Recounting a memorable coaching experience, Coach Dawson shared, “We looked at our coaching staff as a family... Our football program was a family. We were close and we cared about each other.” Paul Warren further underscored the potency of a united coaching staff in fostering community spirit. Coach Warren reflected on the profound connection felt among his staff, where the term 'home' became a heartfelt expression of this deep-seated bond: “That place with those people, they're using the word home, which, gosh, that's hard to wrap your brain around, which is a pretty cool thing.”

Julian Miles resonated with this sense of unity and camaraderie as he talked about his staff: “We were all committed to the same program… it just flowed… we spent a lot of time together.” Reflecting on the harmony within his staff, Coach Miles added, “We just all got along. Everybody cared about everybody.” Stephen McDonald offered a similar sentiment: “We had a

staff that was just like your family at Christmas... Everybody pulled in the same direction, nobody pulled against each other." Meanwhile, Kelvin Harris highlighted a collaborative developmental spirit: "The coaches we had on the staff... were trying to help people at other positions improve too... It was more trying to have a family on the coaching staff that would care for each other and try to help each other grow and learn at the same time."

Mark Lane spoke to the heart of alignment and genuine belonging in a community, cautioning against misaligned opportunities: "I left that other situation because [it was] like, I'm not in alignment with what comes out of your mouth and how you treat players and things like that." He further elaborated on the significance of alignment and community among coaches:

> You find those things that are close to what you believe in... Because this right here, [development] requires contact. Contact is a relationship. You got to be willing to have a relationship with people when you're talking about sharpening their swords.

Russell Vincent touched on his community's synergy: "We all kind of meshed together and we all trusted in the system." Further speaking on this idea of community synergy, Parker Lambert emphasized the importance of systematic trust and shared terminology among coaches:

> I think it's really important that whatever approach you decide to take as a coach and as a staff, that everyone's on the same page and speaking the same language…as I went to different jobs in my twenties, one of the things that I think helped me tremendously was quickly adjusting terminology at different places so that I could speak the same language as those new coaches I was around. And what I learned was the quicker you could speak the same language, the more quickly your ideas will be appreciated and now you're going to make a greater impact.

Parker Lambert's emphasis on "speaking the same language" highlights the value of unified communication in coaching. This shared lexicon builds a sense of community, expedites understanding, and amplifies a coach's impact within the team.

Trust forms the bedrock of this community spirit, as Isaac Carter noted, “You got to have a level of trust…otherwise they're not going to be invested in what you're doing.” Reggie Joseph's experience stands as a vivid example of the profound role trust and camaraderie play within a coaching staff. Suddenly finding himself as the interim head coach for a bowl game, Coach Joseph navigated the complexity of a team in flux, with many of his fellow coaches transitioning to other institutions. It was a scenario he aptly described as “responsibility without authority.” He recalled leaning on the trust and camaraderie that the coaches built among themselves to find a way to develop and ultimately win the game. Emphasizing their shared history and dedication to their players, Coach Joseph recalled rallying his coaches, saying, “Hey, we’ve been together for a long time…we’ve got professional pride…we’ve all worked hard before… We owe it to these kids… We're competing and these players that you've invested so much in, you can't just set 'em adrift.” This rallying cry was not just a call to action but a testament to the deep sense of responsibility the coaches unanimously felt towards their community. Moreover, Coach Joseph highlighted the importance of camaraderie among coaching peers, mentioning, “they’re your work buddies. Like, ‘hey, you're going to desert me in the foxhole here and let me die? I wouldn’t do that to you.’” These narratives culminate in a consensus: trust, aligned communication, and shared commitment are the lifeblood of a thriving sense of community in coaching.

Gordon Bates concluded with the value of trust in team dynamics: “A key ingredient in a staff is that you have guys you can trust.” A thriving coaching community is anchored by trust,

aligned communication, and shared commitment. Such a community not only forges bonds resembling those of a family, but also fosters development and success. A successful coaching environment thrives on these intertwined elements, transcending strategy to prioritize deep-rooted relationships.

Community Facilitation. Coaches emphasized the importance of cultivating this robust sense of community by actively shaping its dynamics. Key steps in this process include: (1) strategically hiring and incorporating the right individuals into the organization, (2) structuring the staff to clearly delineate roles and how each member fits within the organization, (3) overseeing and managing interactions to ensure effective communication and resolution of issues, (4) nurturing a spirit of camaraderie and unity, and (5) prioritizing both individual and collective growth after establishing a cohesive community framework. While these steps appear sequential, coaches often find them unfolding simultaneously in practice.

Before any staff structuring or development can occur, coaches in this study discussed elements of hiring. The hiring process for coaching staff members is deeply rooted in the shared values and beliefs between the head coach and potential staff. Fredrick Dawson expressed this sentiment strongly, noting, “I tried to assemble my staff, and in hiring people, to hire people that had common values and common beliefs, and most importantly a strong family life and family was very, very, very, very important to me.” Echoing this sentiment, Barry Riley stated his inclination to hire those with similar characteristics: “I went with guys on my staff who were similar to what I was.” Kelvin Harris further emphasized the need to hire people who not only held common values but also showcased stellar character. He highlighted his facilitative approach, saying:

> The biggest thing I did were the coaches, the assistant coaches I hired…So the first thing I did is try to hire people I knew. I knew what kind of character they had…So I hired coaches I knew. Coaches I respected. I knew their families. I knew that they would give the best effort to be part of us all the time. And that was important that you had coaches that were very competent, very knowledgeable, and also were great people. And I was able to do that, hire good coaches and let 'em do their jobs. And so that was the biggest key.

With regards to the right people, Paul Warren, referring to the book *Good to Great*, underlined the philosophy of "who first, then what?" Coach Warren stated, "I would absolutely surround myself with the very best of people… I would double down on relationships…pouring into the people." This emphasis on relationships and the intrinsic value of each team member moves beyond mere strategy or tactics. According to Warren, "The relationships are everything, and otherwise it's just a game."

A recurring motif that emerged was the preference to hire those already known to the head coach or those with a reputable character that are aligned. Gilbert Tate underscored this by stating:

> I think the number one thing is to hire the best staff that you can. And most of the time that's people maybe you have worked with or know a lot about, that's extremely important…And you all have to be on the same page. The whole staff has to be on the same page. You can't have anybody saying this and everybody else saying the other thing. And that's in all the phases, the football, what you're attempting to do, the rapport you have with the players, all those things are important that you're all on the same page.

This sentiment was further mirrored by Reggie Joseph, who emphasized the importance of proven ability, especially when considering hiring from within:

> It has benefits, but you still got to make sure you got the right guys that can do it, right? I mean you can't just say, ‘okay, I'm going to make so-and-so, the DB coach, the coordinator now. I hope he can handle it.’ No, you have to have demonstrated to me that you can handle it, that you understand what the whole package is and how to do it. So, the head coach's role is to empower them to get to where they want to go, not stifle… That's the best way to do it.

David Ryan further elaborated on the way to look at internal promotion and guidance of more novice coaches:

> When I felt like Mike was ready, I let him start to run the meetings... So, a lot of people say delegate, delegate, delegate. And I agree you have to delegate... but you also have to show somebody what you want, how you want it done before you turn 'em loose.

Gordon Bates pointed to unity and cohesion as crucial starting points, but also discussed how hiring for a diverse set of perspectives to facilitate growth and prevent stagnation is important too. Coach Bates shared what he found effective:

> Whenever I would hire anybody…they'd come in and I would interview 'em, and then I'd put 'em with the assistant coaches, and then I'd have 'em play noon basketball with 'em, and then I'd have the coaches come back and tell me what they thought. I wanted somebody that would fit in. I [also] didn't want someone who would agree with everything I was going to say or everything they were going to say, but somebody who had a different perspective. You need perspectives in a staff in a meeting room…. the reason it's important is you can't grow. You can't possibly grow unless you're challenged.

> And the things that you sort of think…need to be challenged. You need to make sure that [what you're doing] is exactly what you want to do… You are hiring guys and you want their perspective. So, you've got to be willing to give them a chance to speak their perspective and show you that this is a better way to do it… Every day you better be trying to find a better way to do things and not just stay in with the same old stuff because it gets old, it gets molded.

With the right people in place, the foundation of a dynamic and successful coaching community is set, paving the way for structured staff development and strategic team building.

Following the hiring emphasis, coaches in this study highlighted elements of what they saw as effective for structuring a staff. Julian Miles posited a unique perspective on the value of decentralizing responsibility. He reflected on his tenure at multiple institutions, commenting:

> Almost everybody's got coordinators now. We didn't at [my first school] and we didn't when I went to [another school] and we didn't when I went to [a third school], and when we came [to my current school] in the beginning we didn't. And my reasoning is if you got a coordinator, it all kind of falls on his shoulders. If you've got five offensive coaches, they all got input. If you're sitting in there, say you're coaching the receivers, and you really got some good ideas, but I'm the coordinator so you might be reluctant to say something about it. But now, if we don't have a coordinator, it is always a session where we're just sharing and saying, well, what do you think?

Such a structure, where there is no coordinator, has the intent of promoting a more inclusive environment wherein a coach, regardless of their specific role, might be more inclined to share their insights. Mark Lane also emphasized staff structure as he drew an analogy from John Gordon's book, *The Energy Bus*, which explains the importance of not only getting the right

individuals on board but also positioning them optimally. Coach Lane said, “Everybody wants to get on a bus… But the key is once you get on the bus, get you sitting in the right seats on the bus.” Coach Lane emphasizes the significance of role allocation within a team.

These insights into staff structure underscore the importance of clearly defined roles and a collaborative framework, setting the stage for effective team management and enhanced coaching dynamics.

Following an emphasis on structuring a staff, the head coaches in this study discussed managing and facilitating the way the staff interacts. Balancing autonomy with clear expectations, the head coaches discussed their approach to managing staff interactions, fostering a setting where collaboration thrives alongside a guided sense of independence. Michael Price provided a unique perspective on the challenge of guiding a group of highly motivated and prideful individuals. He emphasized the necessity of channeling their collective energy towards a common goal, rather than against each other. Coach Price stated: “You have to work and interact and function with other individuals that are also highly motivated and prideful... the objective is to get those alphas to pull together and channel their energy towards the opponent.” Another type of interaction mentioned was soliciting unbiased feedback. Ethan Coleman considered this a challenge and stated:

> The challenge of being the head coach is that a lot of times you can't problem solve within your own staff because everybody on your staff has a little bit more of a bias. The offensive coordinator needs to be concerned about the offense. The defensive coordinator needs to be concerned about the defense…. So, there's certain decisions like that where you can't have a staff discussion … So, one of the things I've learned is that I never ask for a staff's opinion on issues where I already know what I want to do. Because you're

> just wasting their time and they know what you want to do, and they'd appreciate it if you just tell 'em what you want to do.

Both Reggie Joseph and Gordon Bates emphasized the importance of collaborative decision making. Coach Joseph highlighted the importance of unity and alignment:

> You always want this [from the staff]; 'Hey, this is the way we do it, not this is the way [the coordinator] wants it done.' Because when you say, 'this is the way [the coordinator] wants it done' it insinuates you have a better way to do it. Now you might have a better way to do it, but that's for you to discuss with [the coordinator] and hash it out and everybody else on the defense, and not for you to go to the D-line coach and say, 'Hey, this is the way we should be doing it, but [the coordinator] wants it done this way'…It was like, I know it better than [the coordinator], and then, even though they didn't say that to the players, it filters down to the players…All the coaches have to be loyal and on the same page. And even though they have different opinions, you gotta argue about it. And then when you leave the room, you got to all be on the same page.

Gordon Bates further emphasized this collaboration stating:

> I think that a head coach needs to make sure that he doesn't have, yes men, he has guys that will challenge his thoughts and challenge him in his processes. So, you've got to learn to do that and respect each other for doing it. And I think it's really important.

In a similar vein to collective decision making, David Ryan discussed managing interactions on staff as he recounted his initial experience as a coordinator, shedding light on inclusive leadership. As Coach Ryan put it:

> We put a system in that we all collaborated on and everybody had some ownership in it…we all found a way to meet in the middle, so to speak, and say, this is how we're going to do this. This is how we're going to do that. This is how we're going to call this; this is how we're going to call that. And everybody had ownership.

Bob Armstrong had a different approach to managing interaction on staff that he found effective. As Coach Armstrong put it:

> If a coach worked for me, I had it all written down. I had things written down… how I expect you to treat your players, how I expect you to coach your players, what's accepted, what's not accepted within the staff, what your responsibility is on the field, off the field, in recruiting. How we're going to address that was all documented. So, my coaches…when they came in and joined my staff, I wanted to make sure they knew exactly what I wanted, what I would accept and what I wouldn't accept.

Although Coach Armstrong saw a more directive approach as effective, he also emphasized that, "I always wanted to give my coaches leeway to get it done their way... I wanted to give coaches the latitude to have that flexibility to work with their own beliefs and how they taught."

The following reflection from Reggie Joseph epitomizes this balance of guidance and independence:

> Ultimately, you got to give people leeway to do it their own way and stuff… I used to say, 'I don't care how many hours you work or exactly how you do it, it's the results that we're interested in–you get the right results, then you're obviously doing something right. It doesn't have to be exactly the way I want it done, but here are the ways, here's what we need to get done. If we have to jam a receiver, he has to be disrupted'…each individual

> coach has to be able to have a leeway to teach it the way they want–to say it their way and get that message across.

This balance of guidance and individual autonomy paves the way for a cohesive team environment, where each coach's unique contributions are valued and harnessed for the collective good.

Once the coaches in this study acknowledged laying the groundwork of how an effective staff was going to interact, emphasis was put on facilitating, nurturing, and building community within the staff. Michael Price believed that one way this was done was by "trying to identify the best in each person and bring it out so that the collective whole can experience it and benefit from it." Coach Price stated that, "People will identify [their talents] for you if you create the environment where they feel like they have the security and the safety to bring out their best. And I think a lot of people don't even know what their best is." He believed that creating this type of environment, "a space where people can be free to be the best versions of themselves" was critical to building a quality community. Kelvin Harris believed that an effective community could be built through involving coaches' families as much as possible. Coach Harris made it clear that:

> We're not going to lose our families while you're coaching. I saw too many coaches growing up and saw a lot of coaches just burning the midnight oil all the time and never got a chance to see their own kids grow up or go to school functions.

One way that Coach Harris included families was by having:

> Family parties. We'd eat together after ball games; we'd have the families together and we'd go find a restaurant somewhere to eat…And then we'd try to have a retreat once a year and go somewhere… A lot of times we'd go skiing when I was at [a school near the

> mountains]. We'd go up there and have three or four days where you could just be together again, talk football and have some fun and fellowship… And then the summer right before we'd start everything, we'd have another retreat, we'd take all the families and we'd take them to someplace like Houston. We'd always go to Galveston down on the water and everything, stay for three or four days and do some things together. Then, our wives did a lot of things together too. They enjoyed dinners together and little picnics and things like that together. All the wives. It's important to keep the wives happy and involved and important too…It was important for us as a family atmosphere in everything we did.

Stephen McDonald also saw community building as important as well and stated that "Anything I asked all my coaches to do, I did it with 'em…I didn't let any of the coaches do anything that I wouldn't do." Coach McDonald strived to create an all for one mentality. This was like Gordon Bates' take on community building on the staff. Coach Bates shared that:

> We had Idea Day for example. And that was once a year. Took two days, and everybody that worked in our department, secretaries, the strength and conditioning area, academics, we gave them a chance to come in and tell us, give us ideas about how we could improve our program. And we had two rules. You couldn't say 'yes, but', or 'the problem with that is', so I would take notes with my director of operations and we would try, we would legitimately try to do everything that everybody wanted to speak to, and all the coaches were in there. And like I said, nobody could say, 'yeah, but the problem with that is' you couldn't do that, and you couldn't say 'yes, but'. You had to listen, you had to see if it would work. And then the director of operations and myself would try to implement

> anything and everything that was brought up. So, we were trying to make everybody in the building a part of what we did.

Coach Bates also shared that:

> Every Thursday before every game I brought all the [graduate assistants] (GAs) in, the video guy, the trainer. I mean, everybody came to this meeting and on Thursday before the game, I'd say, okay, 'tell me what we need to do to win this game.' And everybody had an idea. Everybody had feedback in there… You'd leave that room and you were walking on clouds because they were giving you feedback about what needed to happen. And then I would construct my talk Thursday night around all the conversations that took place in there on that Thursday morning…I don't want feedback that's just what I want to hear. I needed feedback to what would make us better… When I hired 'em, I would tell 'em that. I would tell 'em that I don't want a yes man. I need you to stand up for things you believe. And then I had to embrace, I had to make sure that things that were said I listened to and carefully considered and would give them credit for any of the changes that we would make. I just think that's the best way to run an operation.

This inclusive approach to staff management—valuing each individual's unique contributions—fortifies the community, ensuring everyone's role is integral to the team's success.

The final way that coaches in this study talked about community facilitation was regarding staff development. The coaches believed that with a strong community and structure in place, the focus turns to individual and collective growth. Reggie Joseph discussed the importance of facilitating staff development. In talking about how you must view your staff, Coach Joseph put it this way:

> You have to understand these guys are working to get to where you are. They don't want to be a DB coach for the rest of their lives. They don't want to be a coordinator for the rest of their lives. They want to be something else. So, you got to let them understand that that's okay, that's okay. And then if you're a great coordinator and you get a job at a different school, you got to be ready to replace that coordinator with somebody just as good. You got to anticipate that rather than just saying, 'Hey, I'm going to try to keep him as long as you still want to keep him. Hey, the best thing for me is if he just stays as my lackey for the rest of his life.' He don't want to do that. It's just against the human nature…You have to understand that everybody wants to better themselves and it doesn't mean that they're disloyal to you. They have to be loyal to you, but they still, you have to understand that they want to better themselves so don't mistake their drive or their ambitions for disloyalty.

Recognizing ambition as a natural human drive rather than disloyalty is crucial in nurturing a team where personal growth and collective success are intertwined.

A couple of coaches, like Marvin Wright and Paul Warren, talked about facilitating staff development in separate ways. Coach Wright would emphasize to the young graduate assistants on his staff, "I will give you time to ask questions…I'll give you a chance to ask questions and I'll answer your questions." The openness to inquiry is a hallmark of a dynamic coaching environment, where each question asked is a step toward deeper understanding and expertise. Paul Warren's approach to facilitating staff development took a unique approach. As Coach Warren shared about his process:

> I really thought deeply about our staff meetings every day. And many times, it wasn't just about the practice plan, it would be about readings and learnings from something else.

> And so, I liked to present to the staff and the staff meetings things that I thought would develop them and not only as a human being, but in the coaching world as well, if they applied it. I loved then expounding on that in a team meeting setting. And so, the coaches were hearing that theme or principle at least twice and then going position meeting to position meeting and seeing if they were applying that. And then during the week I worked really hard to have a one-on-one encounter with everyone on the staff, whether I saw it or didn't see it, and how come and how they were using it and either through praise or appropriate feedback to encourage them to do more of that. And so really that was a very intentional way from a daily staff to daily team meeting to then monitoring their position meetings or watching their interactions with their players on the field. And then really working hard to have one-on-one time throughout the week. And that doesn't mean formal time. I found formal time to be the least effective. So, it might've been changing in the locker room, it might have been going for a run, it might've been before practice, it might've been getting lunch. But those touch points to me were really the essence of the exchange and the learning to assess the feedback and sharing the feedback that I had and what I'd seen from them in relation to the principles that were shared.

Such intentional strategies for staff development echo across various coaching philosophies and practices, and they lay the groundwork for a well-rounded, interdependent staff capable of holistic understanding and collaborative success.

The main ways that this intent to develop the staff manifests itself in the coaching communities was through a process that Roland Foster, Marcus Olsen, and Reggie Joseph all talked about. As Coach Foster talked about, he would give his staff two weeks' notice until they were going to do some staff development. As Coach Foster shared:

> I said, okay… the running back coach. 'I want you to coach me up on the offensive line.' And then I take the line coach, I say, 'you got the running backs.' So, all of a sudden they're like, 'whoa, whoa.' And then the receivers, 'you have quarterbacks.' Quarterbacks, 'you have receivers.' So now I get up there and they don't know what I'm going to ask. I say, 'okay, take me through this play.' So now the running back coach will say, 'oh, we're going to read this offensive tackle'…The line coach is telling me what the backs are doing, and the back coach is telling me what the line is doing. And then you find out if there's a problem…and so they didn't like it. I didn't really care. I mean, I just felt like, and they didn't know what I was going to ask. So, they had two weeks to get ready…now they're in there talking to each other… And they're going through the playbook and they're doing this and they're making sure. But now when they start coaching their kids, now that running backs coach can say, 'Hey, the tackle's going to reach this guy's outside number and we're going to read if he has some hook, we're staying outside'. So, they get to see the whole picture.

Marcus Olsen spoke of a similar staff development exercise that he put his coaches through:

> It got a little tedious to them the longer they were on the staff, but I would have the offense present their install. I would have the defense present their install, say why it is what they're thinking about, what their thoughts are. Same thing you tell them why you're doing this, what your thoughts are, what you're thinking about. So, it was part of an education for the whole staff. And then what would happen is the coordinators, they would actually call the other coordinator and say, Hey, look at this. What do you think about, what do you think they're doing here? And so, I think it started a discussion within

> the staff to help better educate them to understand what we're up against and gave us a better chance to have success, whether it be on offense or defense.

Reggie Joseph also talked about this type of development on his staffs:

> When we would put in certain parts of the discipline, offense, defense, whatever, then we'd go each guy to say, ‘all right, how are you teaching this? What are you teaching? Teach us. Get up there and teach us. We're the players. Now show me how you're commanding the room.’ It'd be like when you teach school, there's your instructor, you're a practice teacher, and they would sit in the back just like the lecturer, sit in the back and listen to you. And then after it was over, they go,’ I get what you're saying there, but it's kind of hard to follow that.’ Or, ‘This is what we're trying to do with this hand. Right?’ ‘You're trying to do that.’ ‘Yeah.’ ‘No coach, I think it should be done this way.’ ‘Alright, well if you want to do it that way, that's fine.’

According to the insights shared by these coaches, the staff development exercises discussed here transcend mere administrative tasks, shaping a robust, knowledgeable, and unified coaching staff.

In conclusion, the evolution of a coaching staff is a deliberate and dynamic process. It's a journey that integrates careful selection, strategic role assignment, and continuous personal and professional development. Each step contributes to the rich tapestry of environmentally influenced development in coaching.

Modes of Interaction. The development of coaches within their professional communities is significantly influenced by the nature and quality of their interactions with peers and mentors. As these coaches navigate their career paths, the modes of interaction they engage in play a pivotal role in shaping their professional growth and development. Central to the

quality of these interactions is the element of trust, which emerges as a key facilitator of both observational learning and mentoring.

Trust within interactions forms the foundation upon which coaches build and share knowledge. Michael Price highlighted this role of trust, stating, “when trust is established, now you can get to the point where you're opening up and sharing sensitive information in both directions because the trust is there.” This sentiment was echoed by Julian Miles, who emphasized the difference was made by the quality of interactions within the community. Coach Miles specifically noted the impact of trust on his own coaching staff: “it's hard for me to tell you exactly what happened with the staff…We just all got along. Everybody cared about everybody…just trust in each other…we had an uncanny relationship… It is almost like we're all thinking the same thing.”

Gilbert Tate further highlighted how trust underlies a team’s ability to interact in a comfortable and positive way, pointing out that development often occurs “just with the guys. You're with guys that trust; you trust them, and they trust you.”

However, not all interactions foster such positive outcomes. The absence of trust can significantly hinder development, as illustrated by Parker Lambert's experience:

> At one of my stops in my career, the organization just wasn't a healthy one. Whether it was the quality of the people involved or the leadership involved or the philosophy or just the dynamics, it just wasn't healthy. It wasn't very functional and that can really wear on you.

Similarly, Reggie Joseph reflected on a situation that was not additive, stating that “we didn't have that camaraderie on the staff.”

This foundational trust is not only pivotal in day-to-day interactions but also forms the bedrock for effective observational learning and mentoring, as will be explored in the following sections. Thus, the quality of interactions, underscored by trust, emerges as a crucial element in the professional development of coaches, influencing how they learn from and mentor each other.

Observational Learning. In describing their individual development trajectories, the coaches in this study reported that auditory and visual observation served as a primary mode of interaction. This form of learning showcases the nuanced and often tacit knowledge transfer essential in coaching.

Michael Price discussed feeling fortunate to be a part of multiple coaching staffs and "interacting with different individuals…[by] watching those guys." Coach Price also recalled the impact of observing a coach "take action upon the principles and ideals that he is trying to program [being] a very powerful moment." Coach Price, on the importance of observing those in authority, noted the depth of learning that can be derived from observing "their delivery, their tone, their effectiveness." Such nuances, not explicitly taught but tacitly observed, can offer invaluable insights into effective coaching.

Frederick Dawson echoed this sentiment, stressing the necessity of keeping "your eyes and ears open." Similarly, Russell Vincent reported having a "chance to witness other coaches and their fundamentals…which really helped." Marvin Wright keenly noted observing a coach's behavior during games where he learned how, "Your demeanor during the game is very important because if you're a raving lunatic on the sidelines, your players are going to mirror that. They're going to be the same way."

Coach Wright also highlighted the importance of active listening, referencing instances where as a younger coach, he "sat in the back of that room for hours and just took notes and listened." Barry Riley also encapsulated this sentiment by advocating for coaches to "be good listeners… [because] that was the way I was able to learn." Drawing from his own experiences, Coach Riley talked about how he learned from a coach by "listening to him and observing him on the field."

Isaac Carter's reflections further underscored the value of observational learning, drawing lessons from both effective and flawed approaches in coaching. He shared that "when you look back at the 2013, 2014 staff [I was on], it's crazy who was on that staff, but you kind of saw the good and the bad of what player relations were." Further, citing experiences as a younger coach, Coach Carter recalled observing an older coach that "showed me this is how you prepare to be a coach, and this is what you do on a day-to-day basis." Coach Carter also recalled observing another colleague, noting:

> This guy's going to be a head coach, so if you want to be a head coach, you don't have to be him, but look at what he does…because he carried himself like a head coach. He acted like a head coach. He presented that way.

Gilbert Tate, too, highlighted the richness of learning achieved "by watching and seeing" another coach and "how he handled certain things and what he did." Coach Tate also talked about spending "time listening to him explain what they're doing and how they're doing it. And I think that's all part of the learning process." Reggie Joseph attributed his development to observing other coaches, recalling that he "saw the success that they bred with their methods and [he] sort of just observed it."

Andrew Grant neatly encapsulated the essence of observational learning and its tacit nature when he suggested that with regards to what makes a good coach, “some things that are more easily observed than they are defined.” Stephen McDonald opined that an understanding of coaching expertise develops as “you just start to realize more and more when you watch the coaches that are doing this.” David Ryan echoed this sentiment when he suggested that “you want to listen and learn from the guys that have been doing it a lot longer than you have.” These coaches’ experiences demonstrate how observation can lead to a deeper understanding of coaching, beyond what is explicitly taught.

It's important to note that observational learning is not always inherently positive. As Paul Warren pointed out from his experience, “I saw a lot of ways that were not effective through seeing other college coaches… I saw the ego and I saw the tone and the demeanor and the lack of emotional intelligence and quite frankly, just nonsense bravado and ego and pride” cautioning coaches not to blindly follow methods of others in their communities and to exercise quality discernment.

Ultimately, James Griffin's insights serve as a poignant conclusion, as he summed up the fact that “all along the path in your coaching career, you're observant, you keep your eyes open, and you watch what other people do…[and] I think if you're observant…you develop.”

In summary, these narratives underscore the importance of observational learning in the development of coaches. They reveal how subtle, often unspoken aspects of coaching are tacitly absorbed through careful watching and listening, forming a critical part of the coaches' learning repertoire. This mode of learning, however, requires a balance of open-mindedness and critical reflection to ensure the adoption of effective and positive coaching practices.

Mentoring. Throughout their journey, coaches consistently recognized the indispensable role of guidance and support, especially from mentors in their personal and professional growth. These mentors, often seasoned figures with years of experience, provided not only technical knowledge but also a sense of direction, moral support, and crucial insights into the broader spectrum of coaching—a testament to the intertwined nature of mentorship with trust and observational learning discussed earlier.

Michael Price, speaking from a place of gratitude, noted:

> I was very fortunate in my career to have a head coach that I had a really good relationship with, that I could ask anything. I could go and ask any question that he would answer, and he would be transparent, he would be honest, and he wouldn't be shielded or guarded… So, I could easily go to him. So if there was ever a situation where I was frustrated and maybe I didn't understand, maybe there was a decision from the top that rolled down to me and I didn't understand because I didn't like how it affected me, I could go and talk to him; and then he could remind me that there's a bigger picture above you, there's a bigger picture for you to think about, even though you don't know it, trust and believe that the decision was made for the greater good of everybody. And so, it was good to have a resource like that for several years of my career.

Echoing the transformative impact of mentorship, Julian Miles talked about his mentors acknowledging, “I’ve got a lot of coaches that I respect. But those [two guys] were difference makers… I wanted to be just like them.” Similarly, Mark Lane captured the essence of mentorship, articulating, “There were people that I stand on the shoulders of. We all stand on the shoulders of somebody else that has helped us.” Coach Miles and Coach Lane both illustrate the generational transmission of coaching wisdom.

Russell Vincent's story is also a testament to this, recounting how his mentor provided avenues for hands-on learning:

> He then mentored me and sent me to different places to learn defensive line play that first year and was very helpful…He had a tremendous coaching record and was so good at doing the little things well… that rubbed off on me…so I had great mentors in learning.

Marvin Wright' introduction into coaching, guided by mentors who trusted him with significant responsibilities, illustrates the profound impact of mentorship in shaping a coach's career path. Coach Wright spoke about his mentor: "He gave me my first job…they put me on the road, and I recruited…and in the spring I would help coach the secondary." Likewise, Bob Armstrong shared that "When I started coaching, when I got into the collegiate level, I had tremendous mentors… [one of them] allowed me to coach linebackers the way I wanted to coach them. He never told me how this is what I want done and this is how you go get it done. The same thing with [another mentor]. When I ran the defense, he just wanted to make sure it was sound, how you do the rest of it, it's up to you."

For Parker Lambert, this mentorship wasn't just about professional learning; it was deeply personal as well. As Coach Lambert humbly admitted, "I would not have, hopefully, become pretty good at what I do if it weren't for a lot of people that looked out for me." More broadly speaking, Nathan Ellis fondly remembered how senior coaches "took me under their wing and helped me."

For Walter Collins, mentorship took a more technical role. His anecdote painted a vivid picture of how his mentor would provide him feedback. Coach Collins shared how his mentor once critiqued him for "44 mistakes I made one day in one game. Oh, my goodness. He had 'em all written down. But that was my lab. That was my lab instructor. I was so lucky to have him."

> Isaac Carter talked about how two of his mentors impacted him in different ways:
>
> The first guy that really impacted me. He was very honest, very authentic, and I think he kind of taught me how to do that… I think we're very similar people in a lot of ways. But he kind of showed me this is how you're prepared to be a coach and this is what you do on a day-to-day basis… with [the other coach] it was like, this guy's going to be a head coach, so if you want to be a head coach, you don't have to be him, but look at what he does…That was really good.

In reference to his mentors, Gilbert Tate shared that his mentor:

> Had all the right qualities and I loved being around him. He knew what he was doing, he knew what he wanted to do, and he did it. And I always admired him as one of the guys that I would much like to be like. You can't be like everybody, but he would be one that I would point out that… had a great influence on me.

Aaron Monroe, reflecting on his initial struggles as a coordinator, pointed out that "transitioning to the coordinator's job was much more difficult at that time. I really didn't have a mentor to tell me what are the differences between just being an assistant coach and coordinating a whole offense, and there's some major differences." Coach Monroe highlights how detrimental not having a mentor can be. Coach Monroe did point out however, that when he did find a mentor, "[his mentor] just had a wealth of knowledge about how a coordinator performs his jobs and offensive football that I really adapted to. So, he really became my main mentor offensively. And I remember one of the first things [he] told me that shocked me when I became his offensive coordinator. He said, 'understand, you are the only offensive coach here that cares about how many points you score.'"

These narratives collectively underscore the criticality of mentorship in the realm of coaching. While technical prowess is integral, the human touch—guidance, support, and a deeper understanding of the coaching profession—remains invaluable in shaping coaches for the future. Mentorship, as seen through these diverse experiences, not only complements observational learning and other developmental interactions but also serves as a cornerstone in the evolution of a coach's career.

Experience. A crucial category of Environmentally Influenced Development is experience, which emerged as a fundamental element in shaping the coaching journey. The experiences described by the coaches in this study were not just incidental; they were pivotal in their professional growth and development. This section delves into the transformative nature of these experiences, emphasizing their critical role in the evolution of a coach's expertise. The experiences of traversing through Rites of Passage, Making Mistakes, and Cross Pollinating within the organization each contribute uniquely to a coach's development.

Rites of Passage. Coaches in this study often described their professional journey in terms of rites of passage, highlighting these experiences as milestones marking significant growth and transition. These rites of passage, whether they be initial challenges, major victories, or critical learning moments, were essential steppingstones in their journey, deeply influencing their coaching philosophy and approach.

Michael Price summed up what the stages of this progressive journey for a coach tend to look like:

> When you're a GA, you want to be a position coach and…you become a position coach and you're like, ‘man, there's a lot more to it than I thought’… it's kind of like the horse with the blinders on… then you go from being a position coach… and then all of a

> sudden you get in a coordinator seat and you're like, ‘damn, I didn't realize that I had to do all this.’ So now the blinders are starting to open up and now you see a larger range of responsibility and information. Then, you become the head coach and it's like the blinders are off. And so now you see everything.

Coach Price also broke down what each step along this progressive journey might entail when he suggested that:

> The biggest chase for acquisition of knowledge relative to the fundamentals… was as a position coach… and then transitioning to the coordinator… you’re now responsible for the other adults in the room… then to the head coach, you’re responsible for student athletes and you’re also responsible for members of the staff.

Coach Price is talking about the progressive compounding of responsibility as a coach matriculates through the rites of passage on a coaching staff. This evolution is not just about specific titles, but the compounding responsibility one shoulders at each phase leading to growth and expertise development.

Marcus Olsen talked about these rites of passage in a similar way when he pointed out that:

> As a position coach, you worry about your room…you go to a coordinator…and it multiplies because you’ve got all the positions. Then you take the next step to the head coach and you’ve got the offense, the defense, and the special teams… So, it just multiplies from the time you’re in your position group to you’re a coordinator to you’re a head coach.

Lucas McKenzie talked about how through each rite of passage he traversed he developed coaching expertise through experience. As Coach McKenzie reported:

> Here's the secret. I practiced when I was a GA. It was like I practiced being a full-time coach. When I was a graduate assistant, I carried myself like a full-time coach. I acted like a full-time coach. I taught like a full-time coach. I coached like a full-time coach. When I became a full-time coach, I conducted myself like a coordinator, a coordinator in my room. I conducted my meetings like a defensive coordinator. I taught like a defensive coordinator. I practiced the art. When I became a coordinator, you can know what's next. I practiced as a head coach. I delivered my presentations to the defense as a head coach, I practiced as a head coach.

Coach McKenzie reflects on each of his coaching experiences as transformative, each one a rite of passage that enhanced his understanding of the game and his role within it.

David Ryan talked about these rites of passage and the challenges that each progressive role presented when he pointed out from his experiences that:

> Every time you move from one responsibility to the next, when I went from quarterbacks coach to offensive coordinator, it was a shock to a system and a lot of fear crept in and a lot of doubt. And truthfully, if it wasn't for my wife, I don't know if I'd have made it through. I was faking it half the time, fake it till you make it. But then going from a coordinator to the head coach was even times ten. Until you sit in the chair, you don't understand the weight of that responsibility and the bigger the role, the greater responsibility you had.

Coach Ryan highlights how with each rite of passage, expertise grew as responsibility grew.

In essence, as coaches progress through these rites of passage, they experience a broadening horizon of responsibilities, challenges, and insights. They learn, adapt, and grow, readying themselves for the next phase, pushing boundaries and expanding their expertise.

Making Mistakes. In conjunction with crossing along rites of passage, the experience of making mistakes was repeatedly underscored as a vital component of a coach's development. These moments were not seen merely as failures, but as invaluable opportunities for learning and self-reflection. The ability to recognize, accept, and learn from mistakes was often highlighted as a key driver in a coach's evolution.

Bob Armstrong began by stating a foundational principle: "As a coach, you learn by mistakes." Making mistakes, followed by reflection—a theme that will be further explored in this chapter—serves not only as a corrective measure but also as an intrinsic tool for growth and understanding.

Fredrick Dawson's perspective underscores the iterative process of learning through making mistakes. He stated, "I got a little better every year from experience. Make some of the mistakes you make two times in a row, you learn something. I think every day, every year, good and bad, you throw the bad away and do something else."

The transition along the series of rites of passage into leadership roles, like that of a coordinator or head coach, was frequently marked by a steep learning curve. Coach Wright talked about mistakes and stepping into roles like coordinator when he expressed that:

> You have to learn through trial and error what each individual player that you're coaching can handle. Okay. And then it gets harder when you become a coordinator. Okay, now you're responsible for 11 guys on the field or 55 guys on defense… So, you kind of learn by trial and error. I made many mistakes thinking, oh, I know he knows that. Well, obviously he didn't know it because he screwed it up in the game.

These experiences of making mistakes are not mere missteps; they are, in fact, integral to the rites of passage, marking crucial points of learning and growth for every coach.

Barry Riley further echoed this sentiment regarding his transition to a head coaching role: “I was now doing it. And I think you learn from that too when you do it. I made mistakes.”

Such admissions were not viewed negatively. Ethan Coleman succinctly expressed this concept, asserting, “A lot of times you learn the best lessons through failure... failure is never final. And if you have a growth mindset, you learn from the failure.” In the same vein, Reggie Joseph shed light on the idea that progression often comes after overcoming previous challenges:

> You got to understand, most people are better head coaches the second time around or better something because you learn from your mistakes… You can't worry about the negative outcome... You got to see how you can affect the negative outcome, not worry about, 'Hey, if I do this and it doesn't work out, oh man, this is going to be bad.’

Such reflections, wherein mistakes are viewed as learning opportunities, were echoed across multiple narratives. Isaac Carter candidly mentioned, “A lot of it's learning from mistakes. It's things, ‘okay, I wish I taught that better. I wish I did that better.’” Reggie Joseph further elaborated on the idea:

> Once I woke up and I went like, ‘Hey, wait a minute, what's the worst thing that happened?’ You failed at this thing over here. It was like if you fail, that was the end of the world... but it wasn't the end of the world. It was just that you're going to get better at certain things.

This realization aligns with the foundational principle of learning through mistakes, and further paves the way for the in-depth exploration of reflection and its role in a coach’s growth, as will be discussed in this chapter.

It's imperative to note that while learning from mistakes is essential, there's a limit to how many chances one gets, especially in high-stakes arenas like college football and MCTs. Reggie

Joseph encapsulated this sentiment, saying, “You can't have too much trial and error. There's too much at stake, so you have to make your trial and errors on some little practice area.” While mistakes are integral for growth, the understanding that there are boundaries to the extent of trial and error is equally pivotal, especially in an MCT environment. Mistakes, then, are not simply setbacks; they're pivotal teaching moments that facilitate a coach's ability to introspect, adapt, and refine their expertise.

Cross Pollinating. The concept of Cross Pollinating—engaging in diverse roles and responsibilities within the organization—was identified as another transformative experience. Coaches spoke of the breadth of insight and perspective gained from such versatility, which enriched their understanding of the game and their role within it. This process of moving across different roles and interacting with various aspects of the organization enabled coaches to develop a more holistic and nuanced approach to their profession, contributing to their overall expertise.

As a head coach, Marcus Olsen recognized the importance of and found interdisciplinary collaboration beneficial within his staff. As Coach Olsen recounted:

> Every preseason, I would have the offense present their install. I would have the defense present theirs… ‘tell us why you're doing this, what your thoughts are, what you're thinking about.’ It started a discussion on the staff to help better educate them…whether it be on offense or defense.

Such instances underline the significance and benefits of fostering an environment that encourages staff to cross-pollinate their expertise.

Nathan Ellis, sharing his transition from player to coach, revealed how the experience of being strategically positioned by a mentor expanded his horizons:

> I was a quarterback. And the one thing that really aided my career as a coach, was when [the head coach I was working for] said ‘you know offensive football because you played quarterback…what I’m going to do is I’m going to put you on defense and have you coach with the defensive backs. That’ll make you a more well-rounded coach.’ So, I was fortunate.

Thus, by stepping into diverse coaching roles, Nathan Ellis gained invaluable insights that have significantly contributed to his well-rounded expertise in coaching.

This sentiment of the importance of cross pollinating for development was echoed by Barry Riley, who said, “I want to try to coach all things. I want to learn in-depth about everything. I don't want to be particularly one-sided offense or defense.” Isaac Carter's experiences also underscore the advantage of a varied background: “Fortunately, I grew up in a run game environment. So as a quarterback and wideout guy, I'm not a ‘skill guy,’ necessarily. I've coached a bunch of different positions... So, I actually have a clue about what's going on…that all came from experiences and different situations.”

Andrew Grant showcased confidence in his versatility from cross pollinating, mentioning:

> I'm a football coach. I have a specialty in which I've learned more. But if our offensive line coach had to go into the hospital and he wasn't going to be here for two weeks, and everybody said, ‘who's going to coach the offensive line?’ I'll coach them… I could do it. ‘Well, our special teams coach isn’t here, here who's going to go over the punt protection?’ I'll do it… as a result, during the course of my career, I've been the head coach, the defensive coordinator, the linebacker coach, the defensive line coach, the tight end coach, the offensive coordinator, the play caller, the special teams coordinator, and

> the strength coach. Now, there were lots of people who could have done a better job at some of those, a more detailed job than I could. Absolutely. But when I coached them, we didn't just suck either.

Grant's expansive experience demonstrates resilience and resourcefulness as expertise that comes from a multifaceted coaching background gained from the experience of cross pollinating. This adaptability, born from engaging in a wide array of coaching roles, fosters not just a flexible mindset but a profound mastery of the game that drives innovation and team success.

Stephen McDonald stressed the unexpected benefits of his diverse roles:

> The best thing that happened to me was I played offensive line. I coached tight ends early. Then, I moved to defense. I had a lot to learn and that was a great learning experience… Then I had to help on kickoff…so I had to be involved in kicking. And I think the big thing to help me grow was it was a good experience for an offensive guy to have to coach defense for two full years and then be involved in kicking with no choice… So, I tell all young coaches, man, if you ever get a chance to coach on the other side of the ball, you should not fight it. You should embrace it.

Gilbert Tate, thinking back on his very extensive college coaching career, emphasized the importance of a broader foundation as well when he opined:

> I think the thing that happens with young coaches now is they become specifically oriented. 'I'm a running backs coach or I'm a weak safety coach,' or something like that, rather than having the broad background and knowledge of the whole deal. And I think that helped me growing up that I had to play both ways. I had to play both ways in college for two years because it was one platoon. That's way back, but I think that helps you. And I spent the first 20 plus years coaching defense and then the second 20 plus

> years I was on offense. So, I think that background where I had to coach both sides when I first started helped me. And I think that's one thing that's happened now that a lot of young coaches become specifically oriented to one phase and I'm not sure that's really good.

In essence, embracing diverse coaching roles and experiences is not just about adaptability. It is about acquiring a comprehensive grasp of the game, fostering innovation, and building stronger teams.

The experiences of rites of passage, making mistakes, and cross-pollinating represent more than just sequential steps in a career. They are deeply impactful processes that shape a coach's identity, philosophy, and expertise. Each experience, with its unique challenges and lessons, contributes to personal and professional growth, underlining their critical role in their development.

Knowledge Exchange. In the coaching environment, knowledge exchange is a pervasive element across various aspects of Environmentally Influenced Development, including community dynamics, modes of interaction, and experiences. This section, however, focuses specifically on those exchanges that supplement the core development mechanisms. It captures another perspective as to how knowledge flows within coaching communities, supplementing the primary avenues of development.

Informal Knowledge Exchange. Informal communication channels within coaching circles often serve as rich sources of wisdom, where casual comments, advice, and asking questions can lead to valuable insights and spur innovation. In addition to these specific channels, it's important to recognize that the essence of Environmentally Influenced

Development within coaching realms is predominantly informal, fostering a dynamic environment for continuous learning and growth.

One day, while walking out to practice, Julian Miles recalled a more senior coach saying to him "you'll never hear a Nebraska coach say, 'that kid will never play'" and Coach Miles "remembered that." While it might seem like a small comment, through it, Coach Miles "learned how important the walk-ons were." In a similar type of informal conversation, Nathan Ellis recalled a piece of advice that a senior coach gave to him as Coach Ellis put it, "One thing that I remember him telling me…he said 'tell 'em what to do, tell 'em what they do wrong, and if they do 50% of what you're asking them to do, you're doing a heck of a job." Similarly, Isaac Carter shared an informal yet impactful piece of advice from a senior coach after missing out on a job opportunity, noting that, "he was like, you got to get over the fact that there's going to be a lot of people that are going to get jobs in front of you that don't deserve it" and as Coach Carter put it, "I think that those kind of things always stuck with me." These casual exchanges, brimming with candid wisdom, often become the unsung heroes of a coach's professional development.

Coaches like Ethan Coleman talked about being able to have a "circle of friends [or] peers that I would bounce ideas off of and ask how they were handling things, and they would ask me the same things." Similarly, Gilbert Tate shared that "you learn a lot…from other coaches just in BS sessions." Informal exchanges with peers not only provide spontaneous insights but also set the stage for knowledge deepening through purposeful questioning.

Another way that coaches reported learning informally was through asking questions. Michael Price shared that "If there was something that would stump me or didn't make sense or I was curious about, then that's when I would go ask a question like, 'Coach in this situation, you made this decision. What forced you to make that decision?'" Regarding asking questions,

Marvin Wright put it plainly as he shared “I would sit in the meetings and constantly ask questions.” Similarly, Nathan Ellis also recalled that in his development, “I used to ask a lot of questions. I would ask a lot of questions.” Coach Ellis expanded on this and talked about his informal knowledge collection strategy as he shared that “I always tried to find somebody that I knew who had been a position coach that had experience to get with and talk to and spend time with to be able to ask questions and to learn things.” Isaac Carter also recalled that as a young coach he was “always was asking a lot of questions.” David Ryan pointed out that when he asked questions, it was because he “wanted to know why we were doing the things we were doing.” Coach Ryan found that “because of that curiosity…I had a lot more knowledge than maybe a normal guy” and explained how his expertise grew incrementally through the practice of asking questions. Summing it up, when asked how to develop expertise as a coach, Samuel Fletcher stated that “you ask too many questions…you're barraging [experienced coaches] with questions on why, and I think that's important.”

Formalized Knowledge Exchange. Coaches in this study also mentioned, to some degree, a practice of formalized knowledge exchange. Colloquially known as “clinicling” or “professional development” among coaches, this formalized knowledge exchange represents a structured and purposeful avenue for professional growth. Formal avenues, in contrast to more spontaneous informal exchanges, provide an organized and systematic method for coaches to deepen their expertise.

Marvin Wright delved into the intentionality behind these exchanges:

> Every year I would tell our coaches, even before I became a head coach, ‘pick a school that you guys want to go to visit in the spring, so you can go talk to that guy and watch how he coaches... Go there and learn…When you guys go there, you're there to

> learn…we called that professional development. That's how we justified it to our universities... I would give them a written plan, lesson plan. Here's what I want you to talk to the guy at UCLA about... So, I could say to [our head coach], here's what we learned at UCLA [or] here's what we learned at Arizona State.

Gordon Bates shared that "we would go visit everywhere we could visit to learn, and went to Nebraska…We always go somewhere else to learn. Usually in the spring, we call it research and development time before spring ball, right after recruiting." Similarly, Bob Armstrong recalled: "taking my staff down [to Arkansas] to watch because I knew about [their head coach]. I'd always watched Coach Holtz from afar. So, I remember going down there and spending time at Arkansas watching him there and watch what they did and how quickly they turned that program around."

For Reggie Joseph, this formalized approach to knowledge exchange evolved over time. As Coach Joseph shared:

> Instead of going recruiting, we would go to other schools and observe. Sometimes the whole staff would go, sometimes two guys would go one place, two guys would go another place...sometimes you would just go to a school cold turkey and you wouldn't know anybody there. And then it eventually evolved where rather than your guys going somewhere, we would bring somebody in. They would come in and we would sit in a room like this and there'd be a board. And alright, 'what we want to go over is defending the one back. How do you do it? What's your philosophy?' And if you knew that person well enough, they were going to tell you exactly how they did it. And then everybody in the room would ask questions, 'what do you do there? How do you handle that, if this happens?' And then that would be an all-day thing, maybe two days. So, you would bring

> them in for guest lectures or professional development. ‘We want to know how you defend the option. How do you defend the three-step game?’...A lot of times we would, if a defensive coach came in, we would have the offense sit in there and listen to him too. And if we got an offensive coach, we'd have the defensive guys sitting in there too.

David Ryan further highlighted the depth of these engagements:

> We'll bring 'em in for two days and pick their brain on what they're doing, how they're doing it, why they're doing it…You'd literally sit there. We'd have the offensive staff in the room and the coach that came in town, and then we'd order some pizza and we'd just start working and start exchanging. We could look at film of things he was doing. He could explain what he's doing and why and we could do the same thing for him…And again, it's not very often you're doing it with an opponent, but you're going to be doing it with somebody… from the other side of the country.

Fredrick Dawson shared his experiences on the camaraderie that came with these sessions:

> Just fellowship and sharing ideas and getting on the board and looking at film together. ‘Why y'all do this and why didn't you do that? And this is how we do it and this has been good to us’ type thing.”

Coach Dawson explained that another coach “sent his staff down, they spent three, four days with us and then we went up and spent time with them and they came down for our spring practice. We went up and watched their spring practice.”

Kelvin Harris emphasized the off-season as an opportunity for learning:

> Usually what we try to do is in the off-season, if there's anybody that [our staff] knew that was good that they wanted to go see, they could go visit with them at their position…so they always had a chance to interact with other coaches and then we'd try to

> see who had done a good job, who were the leaders in, say, pass defense or leaders in protection for the quarterback each year and try to get in touch with them and see, what are they doing good.

Formal knowledge exchanges represent a commitment to intentional growth and learning, as coaches collectively deepen their expertise through structured collaboration.

Barriers to Knowledge Exchange. Throughout the interviews conducted for this study, coaches occasionally mentioned barriers to knowledge transfer within their communities. These accounts provide insights into some nuanced challenges of transferring knowledge in professional coaching domains, highlighting areas where knowledge exchange may be hindered or facilitated.

Marvin Wright once welcomed a guest coach for what was expected to be a learning-oriented and professional development visit. The guest coach had expressed a desire to learn coaching strategies from Coach Wright and his team. However, the visit unfolded differently than anticipated. Reflecting on this experience, Coach Wright recounted:

> One guy went on for an hour and I went, 'hold on a second. Are you coming [here] to learn how we do things? I don't really care how you do things…you're the one that paid. You flew in here. You wanted to know how we play our quarters coverage or how we've zone blitzed.' And I said, 'for the last half hour, all I've heard is how you play this coverage and you play this front, which I think is unsound.' I said, 'so are you here to learn from us? I'm not learning anything from you. That's not how we do things. That defense is not sound.' And he kind of had an attitude. I said, 'I'm not being a jerk, but for the last 30 minutes, you keep talking about your defense… I don't want to know about your defense.

This incident exemplifies a key barrier to knowledge exchange: a lack of genuine openness to learning. When an individual prioritizes self-promotion over listening, it not only hinders their own learning but also stifles the collaborative potential of the exchange, turning what could be a mutual sharing of insights into a one-sided monologue.

Ethan Coleman discussed a challenge within his own staff when it came to knowledge sharing–and it had to do with getting feedback from the people on your staff. As he put it:

> If you have a problem that you want to visit on, it's very rare to have a guy on the staff that can give you a completely unbiased answer that's best for the program because all those people have their individual jobs that they're responsible for, and they're going to answer it with a bias on how it impacts them…again, on your own staff, you have to be a little bit careful just because [your coaches] have their individual specific job and you have such an impact over their career, you're not always going to get the most honest answer from 'em.

The inherent biases within a coaching staff can create a filter that skews feedback, sometimes obstructing the path to genuine knowledge sharing and effective problem-solving.

Albert Grant's ideas touch on cultural fit and resistance to adaptability as they relate to barriers to knowledge exchange. He recounted an instance that underscores the difficulties of integrating outsiders into a well-established community culture, "They'll never fully buy into your way of doing things, right? They're just a Catholic in a Baptist church. They're a warrior in an agricultural tribe. They really know what they're doing. They just don't fit this tribe." This perspective underscores that knowledge exchange is not merely about sharing information but also about the willingness to integrate into the fabric of an existing system as a newcomer.

Finally, Aaron Monroe contemplated the intrinsic barrier of ego, remarking on the maturity required to overcome it: “I think all coaches have egos, but I think these guys are mature enough, intelligent enough to not let their ego get in the way of admitting they need to change.” Monroe suggests that ego can be a significant barrier to accepting and implementing new knowledge, implying that personal growth is essential for knowledge exchange.

Self-Directed Learning

Following Environmentally Influenced Development, the second sub-theme that emerged from the data regarding Development Mechanisms was the sub-theme of Self-Directed Learning. This sub-theme indicates a coach's proactive and self-directed approach to growth, going beyond social and environmental settings.

As was pointed out earlier in this chapter under the theme Markers of Expertise, being a Learner manifested itself as a marker of coaching expertise according to the participants of this study. This self-directed approach to learning underscores the necessity for coaches to seek knowledge beyond traditional educational structures. Coaches like Aaron Monroe pointed out **“**there's no classroom for this. There's nobody that's going to teach you how to be a head football coach or even an assistant coach.” Additionally, Andrew Grant pointed out that “There is no manual on how to do it… You don't go to school and major in how to be a good coach… the curriculum is pretty much put together by the student.” With no training manual, Coach Grant Jr. equated coaching development to individual studies and also pointed out that having no manual is, “the good part…it's basically individual studies, you can go any place to learn anything that applies to you.” This self-directed learning theme manifested itself in two main ways according to coaches in this study; one, consuming literature and digital media and two, watching film.

Literature and Digital Media. One avenue through which coaches in this study reported enhancing their knowledge and expertise was by immersing themselves in both literary and digital media. Michael Price highlighted both self-directed avenues, stating:

> The internet is a good source of just finding ideas. You get on the internet and research running back drills, and then you'll see a lot of information. So then that'll also give you access to people that you otherwise wouldn't touch, just through whatever they have available online…and then books, you've got books that you can read.

Books, in particular, have left a profound imprint on many coaches philosophically speaking. Mark Lane turned to literature to find guidance, mentioning that "John Gordon has a book called the *Energy Bus*. In it, he talks about getting the right people on the bus… getting in the right seats. And then the rule is, I got no time or energy for energy vampires." Similarly, Walter Collins was deeply influenced by an athletic director's publication, recounting that the athletic director, "wrote a book called *The Total Person Concept*... And it just teaches you how to sit down and write down your goals... And gives examples all throughout the book." Further highlighting the book's impact, Coach Collins noted, "I think it had a huge impact on the coaches, and I think they took it throughout their careers. Some of them have actually mentioned it to me from time to time."

Other participants reported books and reading material impacted their development as well. For instance, since Kelvin Harris had "never been a head coach" he went to the library at the school where he was a first-time head coach and "read several old football books." Andrew Grant read to gain football specific knowledge. Coach Grant highlighted that:

> When I was growing up in coaching, there was no internet…At that time, there were two magazines that used to come out periodically, Scholastic Coach and Athletic Journal.

> They were, if I remember, exclusively and principally football magazines…there was the AFCA journal that came out every year…There was all sorts of that written stuff…and when these coaching manuals would come out, I would read [them].

Paul Warren, reflecting on his learning journey, expressed a fervent passion for reading, noting that "authors and writers were my influencers... I was passionate about reading and relentless about studying the best practices." Coach Warren expanded on this, saying, "My learning style and my approach was so much more just quiet and intimate with the written word."

In conclusion, the narrative of these coaches underscores the invaluable role of both traditional literature and evolving digital media in shaping their coaching paradigms. Their insights highlight the importance of both books and online resources in their pursuit of coaching knowledge.

Watching Film. Watching film has emerged as a means of self-directed learning and strategizing among the coaches interviewed. This tool allows coaches to both self-evaluate and glean insights from their peers, providing invaluable perspectives on strategy, technique, and player performance.

When discussing how he developed, Nathan Ellis succinctly expressed the role of watching film when he stated, "I watched a lot of film." This sentiment was echoed through Barry Riley's fondness for film, "I loved looking at film. I mean, I did. I loved looking at it and there I would learn schemes and, to some extent, technique." Similarly, regarding film as a self-directed learning mechanism, Paul Warren stated that "film was my friend."

Gilbert Tate shed light on the nuanced ways coaches engage with film. According to Tate:

> You spend a lot of time looking at tape. Sometimes you may look at a tape and you watch something and you say, 'Ooh, that's pretty good.' And it may be the opponent of the guy you're getting ready to be the opponent of, and you say, 'yeah, I think I'm going to give him a call and see what they're doing with this or that.'

Coach Tate's observation emphasizes that watching film is not merely a passive activity but can spur new ideas and proactive outreach and collaboration between coaches. In a similar vein David Ryan pointed to the ripple effect that watching film can have, especially in the interconnected world of college football. Coach Ryan noted:

> Everybody gets everybody else's film…[for an upcoming game] I'm watching four different offensive systems go against that defense [we're about to play], and I'm seeing some really good ideas that we don't have in our system… we need to implement that.

Ryan's insights highlight the evolution of coaching strategies by borrowing and integrating successful plays or defensive tactics from other teams from watching film.

In conclusion, the medium of film stands out as a resource in the toolkit of these coaches. Whether used as a method for introspective analysis, as a means to scout and adapt new strategies, or as a bridge to foster collaborations, film-watching remains integral to the self-directed evolution and growth of a coach in the realm of football.

Reflection

The final main theme that emerged from the data was Reflection. Reflection in coaching transcends its role as a mere tool, emerging as a pivotal component in a coach's professional journey. It bridges the Markers of Expertise with Development Mechanisms, ensuring authenticity in the former and depth in the latter. Through reflection, coaches navigate the complexities of defining their own version of expertise, authentically aligning their growth with

their personal values and beliefs. This reflective practice, serving as the linchpin in the coaching domain, allows coaches to continuously adapt and refine their expertise.

Overall, this study highlights how coaches engage in constant reflection on their experiences and mistakes, using these insights to shape their professional path. Importantly, reflection extends to coaches' interactions with others, underlining the social and environmental aspects of coaching development. This is critical, given the inherently interactive nature of coaching development. This process of reflection helps coaches make sense of their journey, fueling their ongoing development and adaptation.

This section delves deeper into the spectrum of reflection as experienced by coaches, charting their journey from external influences to internal introspection. The reflective process is categorized into three interconnected stages: Reflective Observation, Integrative Reflection, and Introspective Reflection. Through this spectrum of reflection, the section aims to provide a comprehensive view of how coaches navigate their reflective journeys. It highlights the transition from external modeling (Reflective Observation), through the integration of these influences with personal beliefs (Integrative Reflection), and ultimately, to self-analysis (Introspective Reflection). This progression helps coaches synthesize their experiences and learnings, enabling them to carve out their distinct identities, which are firmly rooted in a deep understanding of themselves and their coaching environment.

Reflective Observation

Initially, the stage of Reflective Observation examines how coaches observe and learn from external models in their environment. This reflection forms the foundation of their coaching strategies and is crucial for understanding how they assimilate external influences into their

coaching philosophy. In this stage, coaches take inspiration from the practices, strategies, and philosophies of others, setting the groundwork for their own development.

Numerous coaches underscore the significance of observing and learning from models in their environment, especially when formulating their own coaching strategies. Michael Price broadly expounded on this:

> I think my approach and philosophy in life when it relates to other people is that every relationship that you are a part of is for a reason, and sometimes it's to teach you what not to do, and then sometimes it's to teach you what to do… So when I was a coordinator, when I was a position coach, I always just tried to pay attention and observe the person that was in authority at that time, whether it was sitting in a meeting room with the coordinator, whether it was sitting in a staff room, staff meeting with the head coach, just try to observe their delivery, their tone, the effectiveness, try to gauge the room for the reception, the reaction to what was going on, and then being able to just make mental notes of, okay, that was a good way of doing it, that was not a good way of doing it.

Coach Evan's reflection on the balance of adopting effective strategies, while avoiding ineffective ones, exemplifies the critical nature of discernment in the Reflective Observation stage. This discernment is a foundational step in a coach's development, setting the stage for deeper, more personal stages of reflection.

Further emphasizing this reflective approach to observing models, Frederick Dawson highlighted that to build expertise:

> You need to keep your eyes and ears open and decide from things that are happening in your present situation. Whether you're an assistant, whether you're an analyst, whatever

you do, do you agree with things that are going on? How could you improve things that are going on?

Coach Dawson's emphasis on critical observation points to the role of discernment in the reflective process, highlighting how coaches must be selective and intentional with the influences they incorporate into their practice.

Gilbert Tate made it clear that as a coach "You can learn from anybody. It's not specific to any one individual. If you can take a little bit away from a lot of the guys you work with…I think you should do it." Coach Tate's approach to learning from a diverse range of individuals underscores the eclectic nature of Reflective Observation. His method reveals that reflection is not only about internal scrutiny, but also about being open to external wisdom, regardless of its source.

Kelvin Harris emphasized the importance of Reflection, as he shared that "We had good role models in our coaches, which I think helped me wherever I coached – to go back and remember how they did things. And then from every coach that I worked with after that, I took things from them." Likewise, Bob Armstrong focused on the best of what he saw as he shared; "I took the best of what I thought and then incorporated them into my beliefs and that's how I built my philosophies in everything." Both Coach Harris and Coach Armstrong touch upon the selective process of assimilating external influences, highlighting how Reflection serves as a critical tool for sifting through and integrating these influences into one's unique coaching philosophy.

On the flip side, Barry Riley reflected on aspects of coaching he found ineffective or detrimental as he stated a coach he was working for "would coach by intimidation… and I didn't like that. And that intimidation was applied to coaches as well, and I didn't like that." In

reflection, Coach Riley stated, “I would love to say that I had learned a lot from him. I did not. I learned very little, if anything, maybe I learned what not to do in some situations.” Paul Warren echoed Coach Riley to a broader extent, when he reflected:

> I saw a lot of ways…and just things that I didn't think were effective…and I did not see what I thought was great teaching, great character, great morals, great values, great communication, great kindness, great empathy, and great motives. I just didn't see it. And that was alarming and really abrasive, abrasive is probably the word that was an underlying factor.

Coach Riley and Coach Warren's experiences reveal the dual nature of reflection in coaching. It can attract by guiding coaches towards positive models and effective strategies, yet also repel as it involves the challenging process of identifying and moving away from negative practices. This duality underscores reflection as a tool for both embracing beneficial methods and consciously rejecting detrimental ones.

Isaac Carter noted the ambivalence of Reflection, and thus, emphasized the importance of discernment. Coach Carter said that as a coach “You kind of [see] the good and the bad of what player relations were. And so, you see the things that you want to do, and you don't want to do. And it's like any job, you write down, alright, hey, I like this, I didn't like this, whatever.” James Griffin seconded this idea and stated:

> You look at the guys that are coaching and you kind of look at some of the things that you think are pretty good and some of the things that maybe you throw out that you don't think are good. And I think it ends up being a mentality that there are good things and bad things that you pick up along the way or bad things hopefully you toss out. But the good things you keep.

At one of Coach Griffin's coaching stops he reflected on working for a head coach with "one of those grind it out mentalities":

> Almost every night we stayed at the office until 10, 11 o'clock at night. And that started on Sunday. And we would do that all week long. And then Thursday night we would meet till late and then Friday morning we're gone and on the road recruiting and we would come back either Friday night or early Saturday morning for the game on Saturday. But my point is…we had so much game plan…and what I noticed is we would get into the game on Saturday and when we came back on Sunday to review the game, there was probably a fourth to a third or more of our game plan that we didn't get one call for.

This intense routine, filled with exhaustive planning, led to an epiphany about the inefficiency of over-preparation and the value of a more focused, pragmatic approach to game planning.

Coach Carter and Coach Griffin's reflections point to the importance of discernment in the Reflective Observation stage. Their approaches demonstrate how coaches must sift through the 'good and bad,' applying critical thinking to adopt practices that align with their values.

Stephen McDonald really summed up what reflecting on models in the environment looked like as he recalled his development:

> I think the growing process is all along the way; I was taking mental notes and physical notes on if I ever get to be in charge, I want to be like this coach. But I think more than anything, I was taking notes on how coaches treated people, young people on and off the field and taking notes on how they treated each other in the office. And a lot of what I was taking notes on for my future was making darn sure when I get a chance, I'm not going to do like this coach did. I'm not going to treat people like this coach did…I was

> always able to keep a group of people here that I said, 'boy, I want to be like them to get where they are.' And then I had a group of people over here. [And I would say] 'I know where they are, but I don't want to be like them to get there,' if that makes sense. And to be honest with you, at the end, when that line was drawn, there were a lot more that I don't want to be like…than there were people over here that I wanted to emulate. And I think that was a big part of trying to grow… I've taken good and bad from everybody.

Stephen McDonald's reflections bring a powerful closure to the Reflective Observation section, illustrating the inherent duality of learning through reflection—the conscious choice of what to adopt and what to reject in shaping one's coaching identity. This process goes beyond mere strategy development; it's about establishing moral and ethical standards within their practice. These narratives collectively underscore the transformative nature of reflective practice, framing it as both a catalyst for professional growth and a beacon for personal integrity. As we transition from the initial, observant phase of a coach's reflective journey to the deeper, more personal stages of Integrative and Introspective Reflection, it is evident that reflection is an active, dynamic process—a force that not only shapes but also defines the essence of a coaching philosophy.

Integrative Reflection

Following Reflective Observation, coaches enter a more nuanced phase, called Integrative Reflection. In this stage, coaches not only choose specific strategies, behaviors, philosophies, and techniques from their role models, but also begin to consider how these influences align with their authentic selves. This critical intersection where external inspiration meets internal authenticity leads to a more personalized coaching approach. It is a process of

synthesizing external learning with personal values and beliefs, such that the coaching methods they adopt resonate deeply with the coach's intrinsic understanding of their role.

Coaches in this study not only focused on strictly choosing what they liked and disliked from models during the Reflective Observation stage, but they also pointed out how they reflected what they saw in the environment and how models in the environment aligned with their authenticity. Michael Price noted that:

> The things that I saw the coach do well, I tried to emulate to a certain extent within my own personality type, if that makes sense. So it's a combination of seeing guys doing bad, knowing that I don't want to do that, seeing guys doing good, okay, what makes him good and what can I take away from him, learn from him, and then apply it to my coaching style.

Coach Price' process of emulation and discernment illustrates the essence of Integrative Reflection. It is in this reflective comparison and selective integration where a coach begins to mold external examples into a coaching style that is not only effective but also a true reflection of their own character.

Mark Lane highlighted that throughout his development he saw different ways to be a coach. He pointed out that:

> You have models. There's a Bill Parcells tough model, and there's a Tony Dungy model. I just happened to gravitate towards the Tony Dungy side of faith, family football…Growing up as a young player playing in college, playing in the league for a little bit, and then coaching for such a long time, you find that sweet spot, that pendulum of who you are and who you want to identify yourself as being. And you be an original version of yourself instead of trying to be a copycat of anybody else… There are different

> sides of the pendulum that work. There's other stories of guys being a grinder and being hard and they won. So okay, that's great. Your strategy, you picked your way.

Coach Lane's reflection on the different models of coaching emphasizes the importance of authentic self-identification in Integrative Reflection. His journey towards the 'Tony Dungy model' symbolizes the inner alignment of personal values with professional conduct, shaping a unique and original coaching identity.

As coaches progress through their careers, the observational skills honed during Reflective Observation become pivotal in Integrative Reflection. James Griffin's insights illuminated this transition, emphasizing how the integration of lessons from observed models with personal values leads to the cultivation of an authentic coaching philosophy:

> All along the path in your coaching career, you're observant, you keep your eyes open, you watch what other people do, and you kind of get your own… philosophy of how to do things. And I think that's put together by all of your experiences, all the life experiences that you have as a player, as an assistant coach and if you're fortunate enough to be a head coach… I will say that I think if you're observant, you kind of look at the good and the bad and you pick the good and throw the bad out. You develop a philosophy for how you should coach your players, how you should be as an assistant coach and as a head coach based on what you've seen as a player and as an assistant coach and of course as a head coach. I think the thing you've got to be careful about is that you find an approach that you feel like is good for you, that's who you are and how you think things should be of course…Don't try to be somebody else as far as the way you coach your team or coach your players. X's and O's are important and everybody steals ideas from

> each other as far as X's and O's, but as far as the way you run your team as a head coach or the way you coach your position group as an assistant, you need to be you.

Coach Griffin's journey reflects the iterative process of Integrative Reflection, where a coach's philosophy is continually shaped by the amalgamation of diverse experiences. His emphasis on authenticity stresses the importance of developing a coaching style that not only resonates with one's own values but also effectively guides players and teams.

Ethan Coleman emphasized reflecting on authenticity as he talked about how "You learn from other head coaches and if you ever try to mimic somebody else, that never works." Coach Coleman highlighted the fact that such imitation often leads to disjointed coaching styles and a lack of genuine connection with the team, ultimately proving ineffective. Reggie Joseph also pointed out how reflection leads to authenticity, as he talked about what drove expertise development for him:

> The general immersion of being just like a student in school. Everybody has a teacher that they went, 'oh man, yeah, this guy was, or this woman, yeah, she was really good.' You liked what they did, and it was good. And so, you inevitably are going to take some of those characteristics that they did or those techniques they did and use them and formulate how you do it your way.

Both Coach Coleman and Coach Joseph emphasize the pitfalls of imitation and the power of authenticity. Their reflections, aligning with the theme of Integrative Reflection, highlight that true expertise in coaching is found not in replication but in the reflective practice of integrating learned techniques into one's own unique approach. This is the crux of developing a genuine coaching identity—choosing what resonates personally and professionally, rather than copying another's style.

Andrew Grant noted the decisions involved in the reflection of the authentic self in an apt analogy:

> You go into a really fine men's clothing store. The salesperson comes up and says, ‘can I help you?’ You say, ‘no, I'm just looking.’ ‘What are you looking for?’ He says, ‘what size are you?’ ‘Well, this is what I am.’ ‘Oh, here's something you might be interested in.’ And he shows it to you. You look at it like, ‘no, I'm not wearing that.’ ‘Why?’ ‘Because that's not me. That doesn't fit the vision of who I want to look like.’ Somebody's going to wear it and somebody's going to buy it and they're going to really like it. It's just not me…[it's] about taking what other people have found to be successful and refitting them to fit [you].

Coach Grant's analogy perfectly captures the individualistic nature of Integrative Reflection. Just as one might select clothing to suit their style, coaches too must try on different methods and strategies, ultimately only incorporating what fits their vision and personality. This process ensures that their coaching identity remains genuine and effective.

For Paul Warren, his reflection on the environment served as a driving force behind developing his authentic purpose. He shared candidly about how his observations during his time as a defensive coordinator under other head coaches significantly influenced his perspective:

> Most of [my reflections] were opposing influences…of just ways I was not going to do it. And it was pretty repulsive–the hours, and how the coaches were living, and their relationships with their families–I was just seeing this giant trade off that I didn't think needed to be. And so quite frankly, what was forcing my purpose was, ‘why would I continue doing this the way it's being done?’

For Coach Warren, the reflection on inauthentic practices encountered in the environment acts as a catalyst for introspection. It propels the movement from merely adopting effective methods to a deeper evaluation of why one coaches—their purpose. This introspective clarity is crucial, as it is analogous to authenticity; it forms the backbone of a coach's philosophy, influencing every decision and action they take.

In summary, the Integrative Reflection stage is marked by a critical synthesis of observed models and intrinsic values. As these coaches have articulated, it is within this complex interplay that a genuine coaching identity is forged. Each reflection, each choice, each adopted or discarded technique contributes to the evolution of a coaching style that is as unique as the individual behind it, solidifying a sense of self within the coaching role.

Introspective Reflection

The zenith of this reflective journey is Introspective Reflection. Here, coaches engage in self-reflection, assessing their own experiences, values, and beliefs. This stage signifies a shift from external observations to internal dialogue. Coaches critically evaluate their personal growth and development within the coaching environment. This introspective process allows coaches to solidify their identity and philosophy in coaching, ensuring that their practice is not only effective, but also authentically aligned with who they are.

Marcus Olsen candidly reflected on the personal nature of this stage:

> You have to take what you learned from [other coaches] but you have to be your own guy and put your own stamp on it…It took me a year, a year or two to really figure out who and what I was and how I was supposed to interact with the staff and everybody else around.

Coach Olsen's journey underscores the essential role of introspection in discovering and affirming one's unique identity as a coach. Isaac Carter advocated for a similar inward focus, stressing the value of introspection and self-worth: "You should always be very introspective and self-valued."

Stephen McDonald's experience spoke to the integrity of this self-awareness:

> I drew a line of 'I'm going to recruit the right way'…I lay my head down at night, I've always slept easy. I just never got into it where I had to cover things up. And overall, I'm glad I did it that way.

His peace of mind stems from staying true to himself, highlighting the broader significance of avoiding the perils of pretense—a theme deeply connected to the authenticity discussed earlier.

Reggie Joseph reflected on a pivotal moment in his career, "I didn't do a good job of having enough. I didn't have enough. I don't know. It wasn't confidence. [But] I was doing too many things rather than following my own instincts." However, when he self-reflected and started doing things his way:

> Then it was more 'Katie bar to door'... It was more free. You're having more fun… 'Hey, let's try this!' 'Let's do this!' 'Yeah, sure!' 'We can go!' 'Yeah, yeah. Right!' 'What do you think?' 'Yeah, yeah!' And then you realize that, hey, a lot of this stuff works, man. A lot of these ideas. Oh yeah, they work. And then became more aggressive with it.

This shift exemplifies how confidence derived from introspective reflection can liberate and lead to growth and success.

Andrew Grant offered a vivid metaphor for the introspective journey:

> Let's say somebody's a great pianist. The odds are probably pretty strong that this person thinks about music all day long. I'm just guessing. But, I bet that for a songwriter that's

> not just their hobby, that's their profession. They got lyrics in their head all day long. They're thinking. They're thinking about the first verse. They may be thinking about it for three months before they can put it all together…

He asked the introspective coach to look inward for guidance:

> What's your sense of self? What are you going to do that's going to enable you to follow that? Your sense of self. I don't want to sound too philosophical… but the early navigators who didn't have all these instruments, were taught to navigate off where the North Star is. Now, I don't understand what all this means, but I know that [in] finding the North Star, you'll find your way. What's your North Star? Who are you really? What are the things that make you? Who are you? What's your sense of self and what's your sense of purpose?... It will also help you just as eventually you will say, 'this is how, if I had a team, this is the way my team would look.'

Extending his reflection on coaches' development, Coach Grant observed:

> There is no manual on how to do it…You don't go to school and major in how to be a good coach. Now you take a lot of things in school that you might blend them all together, but there is no manual. It's like, I don't know what the name of it is but I know there are some academic programs at some schools where the curriculum is pretty much put together by the student…That's a really a lifelong project, whatever the field is.

Incorporating Grant's perspective, the process of Introspective Reflection is likened to creating one's curriculum—a reflection of a coach's values, beliefs, and experiences. It's in the careful discernment of what to include in this personal syllabus where authenticity is honed. Coaches, like students designing their course of study, must choose the lessons that resonate with their identity and aspirations.

In summary, Introspective Reflection is the stage where coaches compose the symphony of their careers—not from a prescribed manual, but from a curriculum of life and experience uniquely their own. It is an ongoing project where the environment they are in is the classroom, and authenticity is both the compass and the destination. This final act of reflection bridges back to the essence of a coach's journey, where authenticity is not just a marker of identity but the very foundation upon which they build their legacy.

Chapter 5 - Discussion

Introduction

This chapter presents a comprehensive discussion on the research questions guiding the study of coaching expertise within Mission Critical Teams (MCTs) in college football. It aims to synthesize the findings into actionable policy and practice recommendations, offering in-depth insights into the complex nature of coaching expertise and its broader implications.

The chapter begins by exploring the conceptualization of coaching expertise, including its development, the significance of situated learning, and the dynamics of tacit knowledge transfer among coaches. Following this exploration, it presents practical recommendations drawn from the study's findings to enhance coaching effectiveness and team performance. The chapter then proposes directions for future research that build on the insights garnered from this investigation. It concludes by summarizing the study's key contributions to the understanding of coaching expertise in college football and outlines its relevance for higher education, MCTs, and the sports industry. Through this chapter, readers will gain a thorough understanding of the multifaceted nature of coaching expertise, enriched with practical applications and avenues for future research.

Research Questions

RQ1: How do football coaches conceptualize expertise?

The in-depth interviews conducted reveal that football coaches have a multifaceted and dynamic conceptualization of expertise. This perspective aligns with the literature's definition of expertise as an interplay between domain-specific knowledge, extensive experience, and problem-solving skills, crucial in MCTs (Chi et al., 2014; Ericsson & Charness 1994; Klein 1999). From this study, coaches perceive expertise not just in terms of technical knowledge or

tactical acumen but as an amalgamation of authenticity, diverse markers of expertise, and the drive towards continuous development.

Authenticity as the Foundation. Coaches underscore the criticality of authenticity in conceptualizing expertise. This emphasis on authenticity broadens the existing literature's understanding of expertise by adding an intrinsic, personal dimension alongside technical knowledge or tactical acumen (Chi et al., 2014; Ericsson & Charness 1994; Klein 1999). Authenticity extends beyond just adhering faithfully to a set of principles; it shapes a coach's character. It encompasses the ways in which coaches convey knowledge, engage with their team, and develop professionally. The emphasis on authenticity suggests that coaches view the alignment of professional actions with personal values and beliefs as indispensable to genuine expertise.

Markers of Expertise. The study identifies a range of markers, including content mastery and pedagogical skills (Good Teacher), continuous learning (Learner), and a collection of traits often seen as clichés (e.g., ambition, hard work). These markers highlight a holistic view of expertise that transcends beyond traditional notions of skill and knowledge. Expertise, therefore, is seen as an integration of effective teaching, perpetual learning, and personal attributes, all underpinned by the coach’s authentic self. This holistic view of expertise, encompassing content mastery, pedagogical skills, and continuous learning, resonates with the existing literature on the multifaceted nature of expertise in MCTs, where expertise involves a combination of domain-specific knowledge, extensive experience, and proficient problem-solving skills (Chi et al., 2014; Ericsson & Charness, 1994; Klein, 1999)

Evolutionary Nature of Expertise. Coaches conceptualize expertise as a dynamic quality that evolves over time. This evolution is rooted in ongoing professional development,

shaped by both environmental influences and self-directed learning efforts, with reflection playing a pivotal role in this process. Such a recognition underscores the dynamic and ever-evolving nature of coaching expertise. This aligns with the literature on the dynamic nature of expertise development, as exemplified in Ericsson et al.'s (1993) model of deliberate practice.

Summary. Football coaches conceptualize expertise as a dynamic and multidimensional concept, deeply rooted in authenticity and marked by continuous growth and learning. This nuanced understanding reflects the complex nature of coaching, where personal authenticity and professional skills intertwine and evolve through reflection to shape a coach's expertise. This study's findings break new ground in understanding coaching expertise, particularly in football, by exploring areas that have previously been under-researched in coaching.

RQ2: How do football coaches develop expertise?

The development of expertise in football coaching emerges as a process influenced by both environmental factors and individual initiatives, aligning somewhat to literature findings on MCTs. MCTs describe expertise development as a combination of formal and informal learning experiences, including situated learning and communities of practice (Adkins et al., 2010; Rosen et al., 2012; Salas et al., 2006; Salas et al., 2008).

Environmentally Influenced Development. The most salient driver of the development of coaching expertise is the environment in which coaches operate. The development of coaching expertise, as identified in the study, encompasses informally learning through community dynamics, observational learning, mentoring, and direct experience within their coaching environment. These findings suggest that coaches view their working environment not just as a backdrop but as an active and influential participant in their professional development. This evidence aligns with literature suggesting that sport coaches primarily engage in informal

learning (Cushion et al., 2010). Furthermore, these findings are consistent with literature that emphasizes the role of the environment in expertise development in MCTs (Adkins et al., 2010; Rosen et al., 2012; Salas et al., 2006; Salas et al., 2008). Additionally, the importance of interacting with other coaches, learning by doing, and observing others as key sources of expertise development, highlighted in this research, echoes the observations made by Van Woezik et al. (2021). This finding also aligns with the concept of situated learning (Lave & Wenger, 1991), which emphasizes that learning and expertise development occur within the context of social interactions and specific environments. Coaches in this study internalize norms and values through their experiences and interactions, exemplifying the principles of situated learning. These findings further resonate with Wenger's (1998) concept of communities of practice, as well as Nonaka & Konno's concept of 'Ba' (1998), where the coaching community can act as a vibrant platform for knowledge sharing and collective learning.

Self-Directed Learning. Coaches also engage in deliberate self-directed learning activities, which primarily include engaging with literature and digital media, as well as analyzing game films. This proactive approach highlights the coaches' recognition of the need for continual self-improvement and adaptation in the dynamic field of football coaching and aligns with Ericsson et al.'s (1993) model of deliberate practice. Self-directed learning, while important, supplements the informal learning that primarily occurs through environmental exposure.

Summary. The development of coaching expertise is thus a combination of environmental influences and self-directed efforts. This dual approach highlights the complex nature of expertise development in football coaching, where external factors and personal initiatives play significant roles. These findings extend the application of situated learning (Lave

& Wenger, 1991), communities of practice (Wenger, 1998), and the concept of ‘Ba’ (Nonaka & Konno, 1998) to the specific context of football coaching, an area where these theoretical frameworks have been underexplored but are highly relevant.

RQ3: What role does situated learning play in the expertise development of football coaches?

Situated learning emerges as a pivotal component in the development of football coaching expertise. The study reveals that most of the coaches’ learning and development occurs within the context of their professional environments through interactions and experiences. This finding aligns with the frameworks of situated learning and communities of practice (CoPs), which emphasize social, contextual, and participatory dimensions of learning (Lave & Wenger, 1991; Wenger, 1998).

Learning through Social and Professional Contexts. Coaches acquire significant expertise through interactions within their communities and professional networks. These interactions, encompassing learning from community dynamics, peer interactions, and mentor-mentee relationships, are integral components of situated learning. This form of learning, deeply embedded in social and environmental contexts, plays a crucial role in shaping a coach's expertise. This emphasis on the social and environmental context of situated learning aligns with the literature's focus on these factors in the development of expertise (Lave & Wenger, 1991; Wenger, 1998).

Experience-Based Learning. Experiential learning, characterized by rites of passage, making mistakes, and cross-pollinating roles within the organization, further highlights the role of situated learning in coaching expertise development. These experiences, specific to the coaching environment, offer unique and invaluable opportunities for growth and development, subsequently supporting the literature’s view on the importance of experiential learning in

expertise development through situated learning and communities of practice (Lave & Wenger, 1991; Wenger, 1998). Specifically, the progression of coaches from peripheral roles to central positions within their community exemplifies the concept of legitimate peripheral participation, a cornerstone of situated learning theory (Lave & Wenger, 1991.

Summary. The role of situated learning in the expertise development of football coaches is multifaceted and significant. It underscores the importance of learning that is deeply embedded in social, professional, and experiential contexts within the coaching field. These findings not only resonate with the theories of Lave and Wenger (1991) and Wenger (1998) but also enrich the understanding of situated learning by showcasing how these principles manifest in the unique context of football coaching. The study reveals that the journey towards expertise in football coaching is a dynamic process marked by rites of passage and is deeply influenced by coaches' social interactions and experiences within their professional milieu.

RQ4: How is tacit knowledge transferred among football coaches?

The transfer of tacit knowledge among football coaches is a complex process facilitated through various informal and formalized mechanisms. This finding coincides with the literature that describes tacit knowledge as often transferred through experiential, observational, and interactional methods (Polanyi, 1966; Nonaka & Takeuchi, 1995).

Observational Learning and Mentoring. Within football coaching, tacit knowledge transfer tends to occur through observational learning and mentoring. Coaches often learn tacit aspects of coaching, such as handling team dynamics or decision-making under pressure, by observing and emulating more experienced colleagues. Mentoring relationships further augment this transfer, providing a conduit for the sharing of insights and wisdom that are not readily codified. These aspects of tacit knowledge transfer align with the literature's recognition of the

importance of shared experiences and observations in tacit knowledge acquisition (Polanyi, 1966; Nonaka & Takeuchi, 1995).

Knowledge Exchange Mechanisms. This study underscores both informal and formalized avenues for tacit knowledge transfer. Informal interactions, like casual conversations, and formalized settings, such as workshops and clinics, serve as platforms for sharing tacit knowledge. These findings highlight various channels through which tacit knowledge is shared among football coaches and enrich the existing literature by providing specific examples of tacit knowledge transfer in football coaching (Polanyi, 1966; Nonaka & Takeuchi, 1995).

Summary. The transfer of tacit knowledge in football coaching is a multifaceted process; the task relies on both structured and unstructured forms of learning and interaction, consistent with the literature's emphasis on the complex nature of tacit knowledge transfer in expertise development (Polanyi, 1966; Nonaka & Takeuchi, 1995). Nevertheless, it is crucial to acknowledge that despite the transferability of certain aspects of tacit knowledge through these methods, a deeply personal dimension persists. This dimension, shaped by individual experiences and insights, may elude direct transfer between people. It represents a unique facet of tacit knowledge development that, due to its intrinsically personal nature, remains specific to each individual. The subsequent section will delve deeper into the challenges and barriers inherent in this transfer process, exploring the complexities of sharing such deeply internalized knowledge.

RQ4a: Where do challenges and barriers exist in this transfer process?

Although various mechanisms facilitate the transfer of tacit knowledge among football coaches, this process also encounters significant challenges and barriers. These impediments primarily stem from issues related to trust, communication, resistance to change, and the highly

individualized nature of coaching experiences. Such challenges align with the literature's identification of the tacit knowledge transfer problem (TKTP) (Cline, 2017; Nash & Collins, 2006), emphasizing the difficulties in managing and transferring tacit knowledge.

Trust as a Cornerstone for Knowledge Transfer. Trust forms the bedrock of effective tacit knowledge transfer. In environments where trust is lacking, coaches may hesitate to share insights or adopt new practices. The establishment of a trusting environment is thus crucial for open and honest knowledge exchange. Without a strong foundation of trust, the sharing of tacit knowledge, which often involves personal insights and vulnerable sharing, can be significantly hampered.

Communication Challenges. Effective communication is pivotal for the transfer of tacit knowledge. However, barriers such as miscommunication, inadequate communication channels, limited lexicon for complex ideas, or a general lack of openness can significantly hinder this process. In high-pressure environments where time is a constraint, these communication barriers become more pronounced, leading to missed opportunities for knowledge sharing and acquisition, and, ultimately, mission success.

Resistance to Change. The field of coaching often values tradition and established practices. This reverence can lead to a resistance to change, where coaches may show a preference for traditional methods over new or innovative ideas. Such resistance can stifle the adoption and integration of new insights, limiting the scope and effectiveness of tacit knowledge transfer.

Individualized Coaching Experiences. Each coach's journey is unique, shaped by their specific context and personal experiences. This individualization complicates the transfer of tacit knowledge–as what works for one coach may not be applicable, authentic to, or effective for

another. Moreover, certain aspects of tacit knowledge, deeply internalized and intertwined with a coach's personal experiences and intuition, remain inherently individual and may not be fully communicable or transferable. This aligns with Polanyi's assertion: "we know more than we can tell" (1966, p.4). Coaches must therefore navigate the challenges of adapting and contextualizing knowledge to suit their specific needs and circumstances through reflection. This process of reflective adaptation and the recognition of the deeply internal nature of certain knowledge underscores the need for a flexible and open-minded approach in both sharing and acquiring knowledge within the coaching domain.

Summary. It is evident that while tacit knowledge transfer occurs through various mechanisms, it encounters notable challenges and barriers. These challenges include issues related to trust, communication, resistance to change, and the highly individualized nature of coaching experiences. Understanding and addressing these issues is crucial for creating an environment conducive to effective tacit knowledge transfer. Building a foundation of trust, improving communication pathways, fostering an openness to change, and recognizing the unique journey of each coach are essential steps in enhancing tacit knowledge flow within the coaching community. This approach not only helps in identifying and overcoming potential obstacles but also contributes to enriching the culture of knowledge sharing in football coaching. By highlighting specific challenges within the specific context of football coaching, this study extends existing literature (Nonaka & Takeuchi, 1995; Nonaka & Konno, 1998) and offers actionable insights for both current practice and future research.

Policy and Practice Recommendations

In the dynamic, competitive world of college football, strategically implementing policy and practice recommendations is key to nurturing coaching excellence and maximizing team

performance. This sequence of recommendations, derived directly from the findings of the research, aims to establish a holistic framework that addresses critical areas: organizational efficiency, educational development, feedback systems, instructional enhancement, strategic integration with high-stakes decision-making environments, and personal growth.

Each recommendation is tailored to meet the specific challenges and opportunities in college football as identified in this study. Together, they form a nuanced approach to addressing the Tacit Knowledge Transfer Problem (TKTP), acknowledging that no single solution can effectively address this complex issue. This framework is designed to help bridge the gap between tacit and explicit coaching knowledge.

By embracing these recommendations, college football programs can foster an environment conducive to developing coaching expertise, facilitating a more effective transfer of tacit knowledge, and ensuring sustained excellence. These recommendations not only reflect the insights gathered from this study but also present actionable steps to transform these insights into meaningful improvements within the realm of college football coaching.

Organizational Design for Maximizing Efficiency

To lay the foundation for a comprehensive framework, the first crucial step is optimizing organizational design. This step is pivotal in creating a structured environment conducive to effective developmental strategies and supporting the transfer of tacit knowledge, as highlighted by the research. In the demanding realm of college football, where coaches often work extensive hours (Barnett, 2023), a strategic approach to organizational design is not just about streamlining workflow—it is about cultivating a competitive edge rooted in efficiency.

The research findings emphasize that expert coaches not only accumulate experience but also continually develop and refine their organizational skills. These skills are integral to

managing the complexities of college football coaching. Throughout their professional journey, expert coaches show that meticulous planning and organization transcend mere administrative tasks; they are, in fact, critical components of coaching expertise.

This systematic and efficient approach can allow for football programs to be designed in a way that fosters expertise development through the leveraging of situated learning and reflection. The focus is on distinguishing high-impact tasks that directly contribute to team success and coaching development, and delegating, automating, or simply not doing less critical tasks. This philosophy centers on competing through time management and energy optimization, ensuring that efforts target the most impactful areas while leaving space for coaches to reflect on their experiences, environment, and development.

Key strategies include but are not limited to:

- Refining meeting structures to enhance efficiency and effectiveness.
- Redistributing administrative tasks to free up coaching time for strategic initiatives.
- Implementing technology solutions to automate routine processes.

Beyond professional advantages, this disciplined focus on high-impact activities also significantly improves work-life balance for coaches. It allows for personal renewal and family time, essential for maintaining long-term motivation, effectiveness, and an engaged, reflective mindset critical for both acquiring and imparting tacit knowledge.

Successful implementation of this strategic approach primarily involves a partnership between head coaches and organizational design experts, with support and alignment from athletic directors as needed. Together, they should analyze current coaching workflows, identify streamlining opportunities that align with team goals and coaching philosophies, and adapt as necessary. The ultimate goal is to foster an environment that elevates efficiency and nurtures

reflection, continuous learning, personal growth, and well-being. This environment should align with the team's ethos and objectives, forming a competitive strategy foundational for subsequent recommendations.

Adult Learning Theory in Coaching Education

Building upon the foundation of an efficiently structured organization, a crucial next step is the educational development of novice coaches, particularly graduate assistants (GAs), through exposure to adult learning theory. This strategy directly responds to the study's findings, highlighting continual learning and adaptability as pivotal in coaching expertise. As GAs advance in their careers, they encounter various challenges and experiences that can be navigated more effectively with an understanding of adult learning principles. Such an understanding can ultimately propel these novice coaches towards expertise.

The principles of adult learning theory, as proposed by Malcolm Knowles (1978), highlight the unique ways in which adults learn, with an emphasis on experience, self-direction, and immediate relevance to their roles. For GAs transitioning from players to educators and mentors, grasping these principles is vital in an ever-evolving football environment. It empowers them to effectively process and utilize their experiences for professional growth, and to navigate the uncertainties of coaching rites of passage with greater resilience.

This educational approach, focused on enabling GAs to identify their unique learning styles and motivational drivers, aligns with the research's emphasis on reflection as a cornerstone in the evolution of expert coaches. This approach also mirrors elements of Fink's Taxonomy of Significant Learning, particularly the concept of learning how to learn (Fink, 2013). Such self-awareness is crucial in developing coaching expertise, allowing GAs to reflect deeply on their personal and professional growth.

To facilitate this development, it is recommended that GAs engage in courses and workshops focused on adult learning theory. These programs are instrumental, offering insights into adult cognitive development, diverse learning styles, and strategies for self-directed learning. By understanding these concepts, GAs can better navigate their coaching paths from the onset, balancing self-awareness with adaptability.

Emphasizing education in adult learning theory is key for GAs in developing into expert coaches. Equipped with this knowledge and an adaptive mindset, they are better positioned to transition effectively into leadership roles, thereby enriching the landscape of college football coaching with their deep understanding and capacity for continual growth.

Strategic Partnership with The Learner Lab

Following the focus on enhancing the educational development of GAs through adult learning theory, the next strategic step involves broadening the scope of educational growth to the entire coaching staff with a partnership with The Learner Lab (*Learner Lab*, 2023). The Learner Lab is an educational initiative dedicated to understanding and leveraging the science of learning. They specialize in creating engaging content and strategies to help individuals and organizations enhance their learning skills and apply scientific principles for more effective learning.

This partnership complements the foundational concepts of adult learning by offering diverse, practical learning strategies that benefit the entire coaching staff, bridging the gap between theoretical knowledge and practical application in the dynamic environment of college football and aligns with the findings of the research, which highlight coaches' expertise as manifesting through a continual learning process. Key aspects of this partnership could include:

1. Enhanced Understanding of the Learning Process: In addition to the principles of adult learning, The Learner Lab delves deeper into the learning process, providing coaches at all levels with advanced tools to understand and apply scientific insights into their coaching methodologies.
2. Development of a Growth Mindset: Emphasizing the importance of a growth mindset (Dweck, 2006), The Learner Lab's workshops extend this concept beyond novice coaches, encouraging all coaching staff members to embrace challenges and continuous learning as key drivers of personal and professional development.
3. Application-Oriented Learning for Coaches: With its focus on the practical application of theoretical knowledge, The Learner Lab's approach is particularly beneficial for integrating advanced coaching strategies and translating them into effective on-field practices.
4. Leadership Development across the Coaching Team: The Learner Lab's principles, drawn from various disciplines, provide insights into leadership and team dynamics, enhancing the coaching staff's capacity to lead and manage effectively under the dynamic pressures of college football.
5. Customizable Workshops and Keynotes: Acknowledging the diverse needs of a coaching team, The Learner Lab tailors its content to be relevant and impactful for coaches at different stages of their career, ensuring comprehensive learning and development.

This strategic partnership with The Learner Lab aligns with the continuous growth and emphasis on being a learner identified in the research. It enriches the coaches' educational development by providing a broader range of tools and strategies, further enhancing the capacity for the development of effective coaching expertise.

Enhanced Coaching Feedback Systems

Following the establishment of an efficient organizational structure and a solid educational foundation, the integrated recommendation framework next focuses on implementing enhanced coaching feedback systems. This component is critical for translating theoretical learning into practical skills, driving a cycle of continuous improvement and professional growth among coaches.

Central to this recommendation is an understanding of the Coaching Design and Feedback Cycle (CDFC) program, devised by Spaziani (2023). It serves as a structured system for player and coach interaction and evaluation, pivotal to football coaching practices. The CDFC program, specifically designed to articulate and enhance football coaches' core workflow processes, plays a critical role in player and team development, refining coaching methodologies, and facilitating the transfer of tacit knowledge. The CDFC program operates cyclical manner, comprising the following components:

1. Scheme Development: Coaches analyze player and team capabilities to design schemes that maximize strengths and mitigate weaknesses, developing techniques and teaching progressions for effective scheme execution.
2. Knowledge Transfer to Student-Athletes: Coaches communicate and teach the developed schemes and techniques to players through individual and group sessions, ensuring comprehensive understanding and effective individual and team implementation.
3. Implementation Analysis through Film Review: Coaches review practice or game footage to assess the execution of schematics and techniques, focusing on both player performance and their own effectiveness in communication and teaching as coaches.

4. Performance Feedback Delivery: Insights from the implementation analysis guide coaches in providing targeted feedback, aiding players in understanding their progress and aligning with team strategies.

This dynamic process ensures that coaching strategies and player development are continually evolving, responsive to team needs, and aligned with maximizing performance and success.

Beyond enhancing player and team performance, the CDFC program serves as a platform for coaches to refine strategies, share insights, and integrate tacit knowledge into their practices. Through this program, an environment or 'Ba' (Nonaka & Konno, 1998) is fostered where tacit knowledge can be continuously transferred and integrated in a manner akin to the SECI model of knowledge creation and management through socialization, externalization, combination, and internalization (Nonaka & Takeuchi, 1995), enabling coaching expertise development.

As such, this recommendation advocates for the implementation of a comprehensive evaluation framework of the CDFC program. This framework should integrate regular surveys, in-depth interviews, and analysis of performance data, ensuring the program remains adaptive and responsive to evolving coaching needs. Such a systematic approach is pivotal in enabling coaching staff to continuously refine their strategies and methodologies, thereby enhancing their overall coaching expertise and effectiveness.

Aligning with the study's findings, this recommendation highlights the roles of coaches as both educators and learners. It aims to address the Tacit Knowledge Transfer Problem (TKTP) by enhancing reflection and knowledge sharing through feedback. Institutionalizing these processes creates an environment where continuous reflection, discussion, and application of both explicit and tacit knowledge become integral to coaching expertise development, thereby

fostering sustained success and innovation in coaching practices and enabling coaches at all career stages to adapt and excel in the dynamic world of college football.

Engagement with the Center for Teaching Excellence

As an extension of establishing an enhanced feedback system, the next strategic recommendation is for football coaching staffs to engage with the Center for Teaching Excellence (CTE). This initiative builds upon the previous steps and can significantly enrich coaches' instructional capabilities, creating a synergistic relationship with feedback systems to elevate overall coaching effectiveness.

The study's findings clearly establish that expert coaches excel not just in strategic aspects of the game but also as educators. Recognizing coaches as educators is fundamental to effective coaching. Collaboration with the CTE offers a unique opportunity to enhance their pedagogical skills. This partnership can take various forms, such as regular observation and feedback sessions on coaching and instructional practices, conducted by CTE experts. These sessions would be tailored to focus on improving communication skills, instructional methods, and engagement techniques, contextualized within the realm of sports coaching.

Additionally, the collaboration could include workshops and seminars leveraging CTE’s resources in areas like inclusive teaching strategies and the application of educational technology in coaching. These initiatives, aligning with the need for continual evolution in teaching methodologies, can be dynamically aligned with feedback from evaluations of the Coaching Design and Feedback Cycle (CDFC) program. This ensures that enhancements are effectively tailored to the specific needs of the coaching environment.

By participating in these initiatives, coaches will gain advanced tools and knowledge to communicate complex strategies effectively, foster a positive learning environment, and utilize

sophisticated teaching methods. This directly contributes to their development as educators, a critical aspect of their coaching expertise as identified in the research. Such development is essential not only for the direct benefit of student-athletes but also for fostering a reflective, learning-centered coaching environment.

Strategic Partnership with the Mission Critical Team Institute (MCTI)

As a next step in advancing organizational design, educational development, feedback systems, and instructional enhancements, a strategic partnership with the Mission Critical Team Institute (MCTI) (Mission Critical Team Institute, 2020) is recommended. The MCTI specializes in navigating uncertainty in mission-critical contexts, offering insights into team dynamics and leadership under pressure. Their approach, based on collaborative inquiry and real-time problem-solving, complements the evolving nature of football coaching.

This collaboration introduces specialized, evidence-based strategies from various high-stakes environments, aligning with the principles of continuous growth and adaptability essential in dynamic settings like football coaching as identified in the research. A key part of MCTI's mission is to "develop a more precise and scientifically valid language, to more efficiently and effectively transfer tacit knowledge" (Mission Critical Team Institute, 2020). This goal resonates deeply with the findings of the research, which underscore the significance of tacit knowledge transfer in the development of coaching expertise. Key aspects of this partnership could include:

1. Customized Collaborative Inquiry Programs: Tailored for football coaching, these programs emphasize leadership development, team management, and decision-making in fast-changing scenarios, aligning with the coaching needs identified in the study.

2. Facilitated Retreats: These retreats provide a conducive environment for coaches to explore new perspectives on team building, strategic planning, and resilience, invaluable during periods of transition.
3. On-Site Research and Development: Direct application of MCTI's Collaborative Inquiry model in the coaching environment, fostering a practical link between theoretical research and practice.
4. Expert-Led Seminars and Public Speaking Events: Seminars featuring MCTI experts offer cross-disciplinary insights and evidence-based practices, enhancing the coaching staff's toolkit with diverse perspectives and methodologies.

This partnership aims to supplement existing football coaching methodologies, drawing on MCTI's success across diverse fields. By integrating their scientifically grounded, collaborative approaches, football coaching programs can enhance adaptability, leadership skills, and overall team performance. The incorporation of these new perspectives and strategies plays a significant role in addressing expertise development in football coaching. By introducing innovative, evidence-based strategies into the coaching realm, this partnership fosters an environment where tacit knowledge is more effectively communicated and transferred among coaches.

Reflective Practice and Mindfulness Programs

The final recommendation in this comprehensive strategy for enhancing coaching expertise and tacit knowledge transfer is the implementation of reflective practice and mindfulness programs. These programs are fundamental in fostering a culture of reflection, introspection, and strategic awareness, all of which are indispensable for the continuous development and refinement of coaching expertise. They are designed to complement the

foundational organizational, educational, and collaborative advancements previously outlined, focusing on the internal dynamics of coaching proficiency and personal growth.

The integration of reflective practices and mindfulness into coaching routines is a direct response to the research findings that highlight the pivotal role of reflection and self-awareness in the development of coaching expertise. Reflective practices empower coaches to critically analyze their decisions and experiences, a process in line with the identified need for continuous self-evaluation and adaptability in the dynamic field of football coaching. Potential initiatives might include:

1. Partnerships with Contemplative Centers: Collaborating with entities like the Contemplative Science Center to offer structured reflective exercises after games and practices, providing coaches with tools and space to introspect and learn from their experiences.
2. Facilitation of Introspective Activities: Encouraging coaches to engage in activities that promote reflection on their decision-making processes and outcomes, thereby enhancing their understanding of their coaching style and effectiveness.
3. Integration of Mindfulness Practices: Incorporating mindfulness practices into daily routines to assist coaches in maintaining focus, managing stress, and enhancing overall well-being. This aspect is crucial in supporting the mental and emotional health of coaches, enabling them to approach their roles with clarity and presence.

Mindfulness and reflective practices are not merely ancillary components but are central to the development of coaching expertise. This approach, with reflection identified as a key theme in the study, ensures that coaches are equipped with the necessary tools and mindsets to continuously evolve and adapt authentically to the changing demands of the coaching profession.

These programs should be dynamic and responsive, evolving based on regular feedback from coaches to ensure they remain relevant, effective, and in alignment with the overarching goals of fostering strategic thinking, self-awareness, and the continual growth of coaching expertise.

Summary

This series of Policy and Practice Recommendations outlines a cohesive and comprehensive strategy to enhance coaching expertise and team performance in college football. While each recommendation is valuable independently, together, they form an integrated framework designed to tackle the multifaceted challenges and opportunities in the field. This includes addressing the nuanced yet critical issue of the Tacit Knowledge Transfer Problem (TKTP).

The framework encompasses key areas such as organizational design, coach education, enhanced coaching feedback systems, teaching improvement, strategic integration with high-stakes decision-making environments, and reflective practice and mindfulness programs. Each component plays a crucial role in establishing a foundation for effective coaching, enhancing educational development, structuring feedback mechanisms, enriching instructional capabilities, and developing cognitive and emotional resilience.

Collectively, these recommendations create a robust blueprint for fostering a culture of continuous learning, adaptability, and strategic excellence in college football coaching. They address the TKTP by enhancing both explicit and implicit dimensions of coaching knowledge. Implementing these recommendations will not only advance coaching expertise and immediate performance but also contribute to sustained success and innovation in college football's dynamic environment. This approach bridges the gap between what is known and what can be communicated in the realm of coaching expertise.

Recommendations for Future Research

Reflecting upon the critical insights garnered from this study, the ensuing recommendations for future research are carefully crafted to delve deeper into the nuances and complexities of football coaching. These suggestions aim to expand upon the foundational findings of the study, addressing pivotal areas that promise to enrich both the theoretical understanding and practical application in the field of football coaching.

Longitudinal Study on the Evolution of Coaching Expertise

Building upon the foundational insights of this study, a paramount area for future inquiry is a comprehensive longitudinal study focusing on the evolution of coaching expertise. This research should systematically track the developmental trajectory of novice football coaches, capturing the nuances of their growth over several years. Central to this exploration should be the examination of mentoring relationships, the impact of self-directed learning endeavors, and the role of various environmental factors. Employing a mixed-methods approach, combining qualitative observations with quantitative data, would provide a holistic understanding of how coaches acquire and refine their skills over time. This longitudinal study, grounded in the dynamic nature of coaching development, promises to unveil the intricate processes and milestones crucial for the maturation of effective coaching practices, thereby informing policy and practice in coaching education.

In-depth Case Studies on Coaches' Career Trajectories

Building on the foundational insights gained from this study on coaching development in collegiate football, a recommended direction for future research involves conducting in-depth case studies of individual collegiate football head coaches' career trajectories. These case studies should aim to explore the nuanced experiences, strategies, and pivotal moments that define the

careers of head coaches across a spectrum of success levels. Such studies should aim to meticulously document and analyze the personal journeys, challenges, and triumphs that define the careers of these coaches, with a particular focus on how these elements contribute to their professional development and success within the sport. Through qualitative, interview-based methodologies, future scholars can uncover the nuanced, lived experiences of coaches, providing richer insights into the dynamic interplay of individual agency, institutional support, and the broader cultural context of collegiate football.

Exploring the Impact of Authenticity on Team Performance

The imperative role of authenticity in coaching, a core theme identified in this study, suggests a compelling direction for future research. An in-depth exploration into how a coach's authentic leadership style impacts team performance, morale, and cohesion is warranted. This exploration should employ a sophisticated methodological framework, potentially utilizing psychometric measures to assess authenticity levels and correlating them with various team performance metrics. Additionally, qualitative methods, such as in-depth interviews with players and coaching staff, could offer invaluable insights into how authenticity manifests in daily interactions and decision-making processes. This study could significantly contribute to the theoretical understanding of authenticity in sports leadership, offering practical guidance for fostering authentic leadership within coaching development programs.

Digital Media's Role in Coaching Development

In an era where digital media ubiquitously influences professional development, its impact on football coaching methodologies presents a novel research opportunity. This study should explore how contemporary digital platforms—such as podcasts, YouTube, and AI-driven tools—are reshaping coaching practices. Investigating how coaches engage with these media for

knowledge acquisition, skill enhancement, and strategy development could unveil new dimensions of coaching education. For instance, using podcasts for staying updated with the latest coaching trends, YouTube for visual skill demonstrations or schematics, and AI for game analysis and strategy optimization all offer rich areas to explore. Through surveys, interviews, and perhaps experimental designs where coaches are exposed to different digital media tools, this research could illuminate the evolving landscape of coaching in the digital age. The findings could be pivotal in integrating these digital tools into coaching development programs.

Impact of Reflective Practices on Coaching Effectiveness

Reflective practice, identified as a crucial component of effective coaching in this study, warrants a deeper investigation. Future research should aim to delineate the specific reflective practices that most significantly enhance coaching effectiveness. This could involve a detailed examination of various reflective methodologies, such as structured journaling, peer-reviewed coaching sessions, critical incident analysis, and after-action reviews. The study could employ a longitudinal design to track changes in coaching effectiveness over time, correlating these changes with the adoption of specific reflective practices. Qualitative methods, including detailed case studies and reflective interviews with coaches, could provide rich, contextual insights into how these practices contribute to professional growth and decision-making refinement. The potential integration of reflective practices into coaching development programs could be a transformative outcome of this research, fostering a culture of continuous learning and self-improvement in the coaching profession.

Role of Coordinators and Head Coaches in Facilitating Community and Developing Coaches

A significant direction for future research, inspired by the findings of this study, involves exploring how coordinators and head coaches foster an environment that facilitates the

development of coaching expertise within their coaching staffs. This inquiry would delve into the mechanisms through which these leaders, due to their unique positions and responsibilities, shape and nurture a robust coaching community that promotes both individual and collective growth.

This research would focus on several key areas of facilitation by coordinators and head coaches that were highlighted in this present study, including:

1. Strategic Integration: Investigating how these leaders strategically integrate new members into the coaching community, balancing the skills and personalities to optimize the team's dynamics.
2. Role Structuring: Examining how coordinators and head coaches define and communicate roles within the coaching staff to promote clarity, efficiency, and growth.
3. Management of Interactions: Analyzing how these leaders oversee interactions within the team to ensure effective communication, resolve conflicts, and maintain a positive and productive environment.
4. Cultivation of Camaraderie: Exploring methods used by these leaders to nurture a spirit of unity and teamwork, contributing to a strong, supportive coaching community.
5. Individual and Team Development: Assessing how coordinators and head coaches prioritize and facilitate both individual development and team success, balancing the needs of the team with those of individual coaches.

The methodology for this research would involve qualitative approaches, including in-depth interviews, observational studies, and potentially case studies of specific football teams. These methods would offer rich insights into the lived experiences of coaches under the guidance of

coordinators and head coaches, and how these experiences contribute to the development of their expertise and the transfer of tacit knowledge.

The significance of this research lies in its potential to enhance the understanding of leadership roles in sports coaching, particularly in the context of football. By shedding light on how coordinators and head coaches facilitate the development of coaching expertise, this study could offer valuable guidance for improving coach education and leadership training programs, ultimately elevating the standard of coaching in the sport.

Summary

This section outlines a multifaceted research agenda in football coaching, rooted in the findings of this study. It covers the evolution of coaching expertise, the influence of authenticity on team performance, the role of digital media in coaching development, the impact of reflective practices on effectiveness, and the crucial function of coordinators and head coaches in nurturing coaching expertise. These recommendations aim to enrich academic understanding and practical coaching methodologies, heralding a comprehensive approach to advancing football coaching.

Conclusion

Grounded in the theoretical frameworks of Situated Learning Theory (SLT) and Communities of Practice (CoP), this capstone has explored the intricate process of expertise development among college football coaches within the context of Mission Critical Teams (MCTs). This study provides a nuanced understanding of how football coaches develop their expertise, primarily through informal and situated learning environments marked by interactions with peers and other coaches.

This research emphasizes the significant role of football coaching in higher education institutions, underscoring its impact not only on the athletic field but also on the cultural,

economic, and social fabric of both the institutions and adjacent communities. It recognizes the alignment of football coaching staff with the structure and dynamics of MCTs, highlighting the necessity for coaches, in their competitive work (Rhodes, nd.), to navigate rapidly emergent complex adaptive problem sets (RECAPS), where the consequence of failure can be catastrophic. This places immense importance on the development of coaching expertise, which encompasses the management of diverse human, technical, informational, and environmental variables intrinsic to their profession.

Central to this study's findings is the pivotal role of authenticity in coaching, identified as a foundational element for effective coach development. This authenticity not only mirrors a coach's true character but significantly influences markers of their expertise and mechanisms of development. It shapes how coaches learn, teach, and evolve in their profession, ensuring that their growth is authentically aligned with their genuine self and values. Furthermore, the essential role of reflection in coaching expertise development is highlighted, illustrating how reflective practice enables coaches to continuously adapt and refine their expertise in alignment with their personal values and beliefs. This process of introspection is integral, subtly weaving through the fabric of their professional journey, enhancing both the authenticity and depth of their coaching acumen.

This investigation contributes to a deeper understanding of the pathways for enhancing coaching expertise and more effectively managing tacit knowledge within the realm of football coaching. The insights gained extend to the broader context of higher education, demonstrating how enhanced coaching methodologies in football may not only improve athletic performance but also can support the holistic development of student-athletes, aligning with universities' educational missions.

Additionally, within the broader landscape of American higher education, there lies a potent, untapped potential within collegiate football to transcend traditional boundaries and redefine its contribution to the academic milieu. Football, with its deep roots and widespread appeal, stands uniquely poised to meld the rigor of academic inquiry with the vibrancy and complexity of athletic competition. This vision challenges football programs to evolve beyond their athletic identity, becoming interdisciplinary platforms where lessons from the field can inform academic pursuits, and vice versa. By doing so, football can illuminate paths for collaboration across departments, fostering a more interconnected university community, and improving institutions' abilities to create knowledge. This reimagining positions football not merely as a sport, but as a dynamic vector capable of driving institutional advancement, enhancing the holistic development of student-athletes, and enriching the educational landscape in America. At this juncture, the invitation is subtle yet profound: to harness the cohesive power of football, fostering a culture of unity and intellectual curiosity that resonates well beyond the stadium's bounds.

In conclusion, this research offers valuable insights and strategies for the professional development of football coaches, ultimately benefiting the overall quality and success of the sport. It provides new insights to inform MCT development writ large, while emphasizing the role of sports in shaping the institutional identity and culture of universities, influencing policies and practices that contribute to the overall educational and developmental goals.

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Appendix A - Interview Protocol

Warm-Up Questions:

1. Can you share a bit about your journey to becoming a football coach?
    a. What drew you to coaching college football?

Transition Questions:

1. What do you believe are the crucial elements of being an expert college football coach?
    a. What do you need to know to be a good coach?
2. Can you talk a bit about how your understanding of what it takes to be an expert coach has evolved throughout your career?
    a. Are there any specific moments that stick out?

Core Questions:

1. How has your coaching expertise evolved over the years?
    a. What were the key influences that shaped this evolution?
2. Tell me about a relationship with another coach that has had an impact on your expertise development.
    a. Why did this person come to mind?
        i. How has this relationship evolved over time?
3. How has your approach to sharing your expertise evolved throughout your career?
    a. Can you describe a turning point in your career where you felt you significantly improved your ability to share your expertise?
4. What was the most successful moment of your career?
    a. Can you walk me through how you got there?
5. What was the lowest point of your career?
    a. Can you walk me through how you got there?

Wind-Down Questions:

1. If you could give one piece of advice to a new head coach about managing the many aspects of coaching - such as building relationships with team members and staff, strategizing for games, processing, and applying information about your team and opponents, as well as dealing with environmental factors like resources, team morale, or external pressures - what would it be?
2. Is there anything else you'd like to share about your coaching experiences, particularly around uncertainty and how you approached that decision making, that we haven’t covered today?