The Effect of Community-Based Homologous Reproduction on Diversity in Collegiate Football Coaching Staffs

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Abstract

Diversity within leadership roles in collegiate sports, particularly football coaching, remains a persistent issue despite growing attention to inclusivity and representation. While the student-athlete population has become increasingly diverse, leadership positions in college athletics, especially head and assistant coaching roles, continue to be overwhelmingly dominated by White individuals. This imbalance is not merely a reflection of outdated practices, but a complex result of both internal biases and external social factors that influence hiring decisions. This study aims to (1) examine the representation of racial minorities in intercollegiate football coaching positions, and (2) explore how the diversity of institutions' surrounding communities influences the racial and ethnic diversity of football coaching staffs. The study involved head coaches and associate coaches from NCAA Division I and II collegiate football programs in the United States. Using a convenience sampling method, a total of 30 coaches provided valid responses through surveys and the data was analyzed to gain a comprehensive understanding of the factors influencing coaching staff diversity. Data on community and campus diversity were sourced from U.S. Census and institutional records. The findings strongly support the theory of homologous reproduction, indicating that head coaches tend to hire assistant coaches who share their racial background. White head coaches had significantly more White assistant coaches, while Black head coaches hired more Black assistant coaches. Moreover, the results highlight the moderating effect of community diversity; as the diversity of the surrounding community increases, so does the racial and ethnic diversity of coaching staffs. While homologous reproduction continues to significantly shape coaching staff composition, external factors such as community and campus diversity are essential in mitigating its effects, promoting greater inclusivity in collegiate football coaching.

Keywords: Diversity, homologous reproduction, race, ethnicity, coaches, collegiate

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1. Introduction

Diversity within football coaching staffs remains a critical issue in collegiate sports. Previous research highlights that minority groups are underrepresented in both head and assistant coaching positions on men's and women's teams (Lapchick, 2009; Lapchick, 2010). On Division I men's teams, White males dominate the coaching landscape, comprising 89% of head coaches and 77% of assistant coaches. A similar trend exists on women's teams, where White males account for 88% of head coaches and 79% of assistant coaches (Lapchick, 2009; Lapchick, 2010). In contrast, Black coaches are significantly underrepresented, holding only 7% of head coaching positions and 18% of assistant coaching roles on men's teams, and 7% of head coaching and 14% of assistant coaching positions on women's teams (Lapchick, 2009; Lapchick, 2010). According to Lapchick (2023), "Black head coaches remained at 13 while the number of Latino head coaches decreased by one to five in 2022. At the start of the 2022 season, 83.2% of head coaches were white, which was actually a 0.9 percentage point increase from the 2021 report card" in relation to the Football Bowl Subdivision (FBS) coaching staffs. In addition, "the Football Bowl Subdivision (FBS) leadership positions who make the hiring calls -- presidents/chancellors and athletic directors, are overwhelmingly white and male." With the FBS having almost 66% of football student-athletes as people of color, there are disparities in those who are in charge of these athletes. Recognizing this racial disparity is an essential step in understanding the underlying causes of this inequity and examining current trends in disparity compared to the current demographic characteristics in intercollegiate sports.

One theoretical framework used to explain this disparity is the concept of homologous reproduction, which posits that individuals tend to hire others who are similar to themselves, whether consciously or unconsciously (Kanter, 1977). This theory has been widely applied in diversity studies to explain the racial imbalance within college coaching staffs (Cunningham & Fink, 2006; Cunningham & Sagas, 2005; Doherty & Chelladurai, 1999; Fink et al., 2001; Lovett & Lowry, 1994; Norman, 2010). However, much of the research on homologous reproduction has focused on direct hiring practices, specifically how decision-makers' characteristics influence their selection of candidates. There remains a gap in understanding the broader, indirect effects of homologous reproduction, particularly in relation to external factors such as community demographics and expectations.

This study seeks to extend the existing body of research by examining homologous reproduction not only as a function of individual decision-making but also as a community-level influence. Specifically, the study investigates whether the racial and ethnic composition of a university's surrounding community impacts the diversity of its athletic department's coaching staff. The following research questions guide this inquiry:

RQ1: Do schools located in more diverse communities exhibit more diverse coaching staffs?

RQ2: Do schools in less diverse areas demonstrate a higher degree of homogeneity within their coaching ranks?

The purpose of this study is twofold: (1) to examine the representation of racial minorities in intercollegiate football coaching positions, and (2) to investigate how the diversity of institutions' surrounding communities influences the diversity of football coaching staffs. The study focuses on institutions in the NCAA Division I and II. Online

surveys were conducted with head coaches and associate coaches at these institutions to explore community influences on hiring practices and cultural inclusion in coaching positions.

This study extends the theory of homologous reproduction by introducing community demographics as a factor influencing hiring decisions in collegiate athletics. It suggests that athletic departments should critically examine their hiring processes, particularly in relation to the influence of homologous reproduction.

2. Literature Review

Homologous Reproduction in Sports

The theory of homologous reproduction has been applied extensively in explaining the large differences in gender and race representation within college coaching staffs (e.g., Cunningham & Fink, 2006; Cunningham & Sagas, 2005; Fink et al., 2001; Doherty & Chelladurai, 1999; Lovett & Lowry, 1994; Norman, 2010). According to Lovett and Lowry (1994), the decline of women serving as coaches in women's sports can be attributed to a variant of homologous reproduction referred to as the "good old boys and girls" networks. In their study of 1,106 public secondary schools in Texas, they found that administrative structures significantly influenced the hiring of coaches by gender. Specifically, women tended to hire more female coaches when they dominated administrative positions. However, when they were in the minority, women were less likely to reproduce their presence in coaching roles (Lovett & Lowry, 1994). This finding aligns with the theory that individuals in positions of power tend to replicate their own demographic characteristics in hiring decisions.

The exclusion of women from coaching roles, both on men's and women's teams, has also been

facilitated by subtle minimization of their experiences and accomplishments, as well as a lack of opportunities for professional development (Lovett & Lowry, 1994; Norman, 2010). Female coaches have historically been marginalized, not only due to a lack of administrative support but also because of the negative attitudes of male head coaches. These attitudes often translate into minimal credibility being assigned to female assistant coaches, hindering their career progression (Sagas et al., 2005; DeSensi, 1994). As a result, many female coaches have lower aspirations for career advancement, feeling they must work harder to prove their capabilities compared to their male counterparts. This situation is exacerbated for female coaches from ethnic minority groups, who face additional challenges in a predominantly White male-dominated profession (Norman, 2010; Taylor & Toohey, 1999).

Ethnic Minority Representation in Coaching

Ethnic minority coaches face significant barriers in the coaching profession, particularly at the collegiate level, as a result of homologous reproduction. Cunningham and Sagas (2005) examined the underrepresentation of racial minorities in intercollegiate coaching positions, finding that both Black and White head coaches were more likely to hire assistant coaches who shared their own racial and social characteristics. This tendency results in a perpetuation of demographic homogeneity within coaching staffs, limiting opportunities for minority candidates to break into or advance within the profession (Cunningham & Fink, 2006; Cunningham & Sagas, 2005). Additionally, when racial minorities do secure coaching positions, they often face poorer treatment compared to their White counterparts, which leads to a higher intent to leave the profession (Cunningham & Sagas,

2004; Fink et al., 2001). When minorities do receive opportunities to be in positions of power, specifically as head coaches in collegiate athletics, this number still remains small. The Institute for Diversity and Ethics in Sport (TIDES) at the University of Central Florida releases an annual report that focuses on different professional sports organizations, college sport organizations, genders, races, and ethnicities through a grading scale that reflects how diverse an organization is. With their latest publication in 2022, TIDES reported that Black coaches held only 9% of head positions at the Division I level, minimal increases at the Division II level (6.2%, up 0.2%) and minimal increases in Division III (5.9%, up 0.4%) sports (Reed, 2022).

The relatively small differences in occupational turnover intent between White and Black coaches can have outsized effects, as they contribute to the already limited pool of minority candidates available for head coaching positions (Cunningham & Sagas, 2004). Furthermore, Black coaches report fewer perceived opportunities for advancement compared to their White peers, further hindering their career progression. Although the hiring and retention of minority coaches appear stable in recent years, caution is advised as the long-term effects of economic recessions on diversity may still emerge (Lapchick, 2009; Lapchick, 2010). Despite these challenges, current research recognizes the value that diversity brings to an organization (Fink & Pastore, 1999).

Hypothesis 1 (H1): Head coaches who are White will have a higher proportion of White assistant coaches on their staffs compared to Black head coaches.

Hypothesis 2 (H2): Head coaches who are Black will have a higher proportion of Black assistant coaches on their staffs compared to White head coaches.

Value and Challenges of Diversity

Diversity within an organization can provide significant benefits. Research suggests that ethnically diverse groups offer multiple perspectives, leading to more democratic decision-making, greater creativity, and tangible problem-solving solutions (Fink & Pastore, 1999; Cunningham, 2009; Girginov et al., 2006; Doherty & Chelladurai, 1999; DeSensi, 1994). Additionally, diversity can stimulate constructive conflict, which improves decision quality, fosters innovation, and increases curiosity and engagement (Chatman & Flynn, 2001; Doherty & Chelladurai, 1999). Despite these advantages, positive outcomes from diversity are not always immediate. They often emerge later in the work process after teams have overcome initial challenges related to organizational diversity (Ely & Thomas, 2001).

Conversely, negative outcomes of organizational diversity can present immediate challenges for organizations. Milliken and Martin (1996) note that diversity can lead to increased workplace ambiguity, complexity, and miscommunication due to diverse perspectives. Racially diverse groups may struggle with communication and perform less effectively on complex tasks (Watson, Kumar & Michaelson, 1993). Moreover, these groups can find it harder to reach consensus and may experience higher stress levels compared to groups that are not required to conform to diversity initiatives (Cunningham, 2008). In addition, the immediate reaction of majority group members to diversity initiatives often includes feelings of disrupted communication and threatened power dynamics and traditional norms (Doherty & Chelladurai, 1999). In contrast, minority members frequently experience such initiatives less favorably, reporting increased absenteeism, higher turnover, and reduced organizational commitment (Doherty &

Chelladurai, 1999; Fink & Pastore, 1999). Cunningham and Sagas (2004) explored the effects of racial dissimilarity within coaching staff and found that racial dynamics influenced organizational commitment. Black coaches demonstrated lower organizational commitment when coaching staff were racially mixed, while White coaches felt the least committed when they were in the minority. White coaches, on average, reported lower organizational commitment levels than Black coaches in these situations (Cunningham & Sagas, 2004).

The above findings suggest that organizational and racial alignment plays a role in influencing commitment and cohesion within coaching staff. It can be inferred that head coaches who perceive stronger community expectations for racial or demographic alignment may make hiring decisions that reflect the demographics of their community. Such expectations, whether explicitly communicated or indirectly perceived, can influence hiring practices in ways that aim to align the coaching staff with the racial and ethnic composition of the surrounding community.

Hypothesis 3 (H3): Head coaches who perceive a stronger community expectation for racial or demographic alignment will be more likely to hire coaching staff that reflects the community's demographic composition.

Furthermore, the diversity of the surrounding community can significantly influence hiring decisions. Universities located in communities with a higher minority population are likely to prioritize racial and ethnic diversity in their coaching staffs to better reflect the demographics of the local area.

Hypothesis 4 (H4): Community with a higher minority population will exhibit a greater degree of racial and ethnic diversity within their coaching staff.

Regardless of the challenges associated with implementing diversity initiatives, sports organizations often consider diversity an operational imperative (Trischler, 2008; Phillips-Morrow et al., 2000). These organizations increasingly recognize the value of fostering diverse and inclusive environments, not only for the benefits it brings to performance and creativity but also for its role in representing the broader community and student body. Importantly, institutions with higher campus diversity, particularly a greater representation of minority student-athletes, may mitigate the effects of homologous reproduction in hiring decisions. In such environments, head coaches are likely to align coaching staff diversity with the demographics of both the student body and the surrounding community. The interaction between campus diversity and the tendency for homologous reproduction is likely to influence the overall diversity of coaching staffs, reflecting an institution's commitment to inclusivity and ensuring that the homogeneity typically associated with homologous reproduction is weakened in more diverse settings.

Hypothesis 5 (H5): Campus diversity moderates the relationship between homologous reproduction and coaching staff diversity.

3. Methodology

Participants and Procedure

This study examined collegiate football programs at NCAA Division I and II institutions in the United States, focusing on the racial and ethnic composition of coaching staffs. Using a convenience sampling method, a total of 66 university football head or associate coaches were initially contacted, representing a variety of geographical locations and community demographics. Schools from racially diverse regions as well as less di-

verse areas were included to capture the full spectrum of community diversity. 30 Head coaches and associate coaches completed online surveys on their staff composition and their perceptions of community expectations (response rate: 45.5%).

Measurement

All scales were adapted from previous literature with some modifications and measured on a 10-point Likert-type scale, ranging from "Strongly Disagree" (1) to Strongly "Agree" (10). Perceived community expectations were assessed using three survey items in which head and associate head coaches rated the extent to which they felt pressure from the community to hire coaching staff that reflected the community's racial and ethnic composition (Rivera, 2016).

Additionally, the study measured several variables using U.S. Census and institutional data, including community diversity (percentage of minority population in the community surrounding each university), campus diversity (percentage of minority students enrolled at each university), coaching staff diversity (percentage of minority assistant coaches on each football team), and homologous reproduction (percentage of assistant coaches who shared the same race as the head coach). For the purpose of this study, we utilized a process of making judgments about coaches' race or ethnicity based on observable characteristics, such as skin color, facial features, or cultural markers, derived from information on teams' websites. Understanding racial or ethnic categorization from a third-party perspective is crucial for gaining insight into stakeholders' perceptions and the views of people within the community. Finally, the head coach race was treated as a binary variable: White (coded as 1) or Black (coded as 0). This variable was used to examine the racial composition of the coaching staff based on the head coach's race, specifically focusing on individuals identified as either white or black. Due to the significant underrepresentation of other racial groups in the sample, individuals of other races were excluded from the analysis.

Data Analysis

Data analysis was conducted using IBM SPSS Statistics, employing Pearson correlation, t-tests, ANOVA, regression, and moderation analyses to test the study's hypotheses. For RQ1, Pearson correlation and ANOVA were used to assess the relationship between community diversity and coaching staff diversity. For RQ2, ANOVA compared coaching staff homogeneity across schools grouped by community diversity into high (top 30%), medium (middle 40%), and low (bottom 30%).

To test H1, a t-test compared the proportion of White assistant coaches under White vs. Black head coaches, with head coach race as the independent variable and the proportion of White assistant coaches as the dependent variable. Similarly, H2 was tested by comparing the proportion of Black assistant coaches under Black vs. White head coaches using a t-test. For H3 and H4, Pearson correlation and regression analyses examined relationships between perceived community expectations, community diversity, and coaching staff diversity.

To test H5, a moderation analysis using Hayes' PROCESS Model 1 with 5,000 bootstrapping iterations was conducted. The independent variable was homologous reproduction (percentage of assistant coaches matching the head coach's race), the dependent variable was coaching staff diversity (percentage of minority coaches), and campus diversity served as the moderator.

4. Results

The Impact of Community Diversity on Collegiate Football Coaching Staff Composition

For RQ1, a Pearson correlation analysis was used to assess the relationship between community diversity (measured as the percentage of minority population in the community) and coaching staff diversity (measured as the percentage of minority coaches on the team). The Pearson correlation test indicated a significant positive relationship between community diversity and coaching staff diversity, $r = .51$, $p = .01$. This suggests that as community diversity increases, the racial and ethnic diversity of coaching staff also increases.

Additionally, an ANOVA was conducted to compare schools in more diverse communities with those in less diverse communities, in order to determine if there were significant differences in coaching staff diversity. For the analysis, only the high and low groups were used to provide a clearer understanding of the impact of community diversity on staff diversity. In this test, community diversity was the independent variable, and coaching staff diversity was the dependent variable.

The results showed a significant main effect of community diversity on coaching staff diversity, $F(2, 27) = 4.88$, $p = .016$. Schools located in more diverse communities ($M = 28.04$, $SD = 11.53$) had significantly more diverse coaching staffs than schools in less diverse communities ($M = 49.71$, $SD = 23.12$; $p = .015$). This indicates that schools in more diverse communities tend to have more racially and ethnically diverse coaching staffs.

TABLE 1

Racial Composition of Assistant Coach across Head Coach Race

Head Coach Race	No. of Assistant Coaches				Proportion of Assistant Coaches			
	Black		White		Black		White	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Black (*n* = 4)	5.75	1.63	3.75	1.93	56.38	15.89	36.13	20.41
White (*n* = 26)	3.20	1.76	5.73	1.71	32.23	15.49	62.13	14.81
Total (*n* = 30)	3.55	1.76	5.47	1.59	36.70	16.34	58.60	19.69

For RQ2, a similar approach was applied but focusing on the homogeneity of coaching staffs (measured by the percentage of White coaches) rather than diversity. An ANOVA compared schools in less diverse communities (low diversity) with those in more diverse communities (high diversity) in terms of coaching staff homogeneity.

The ANOVA comparing three levels of community diversity (low, medium, high) indicated significant differences in coaching staff homogeneity, $F(2, 27) = 4.88$, $p = .016$. Post-hoc tests using Tukey's HSD revealed that schools in the lowest diversity group ($M = 71.96$, $SD = 8.89$) had significantly higher homogeneity compared to schools in the highest diversity group ($M = 50.29$, $SD = 23.12$; $p = .015$). This suggests that schools in less diverse areas tend to have more homogeneous coaching staffs, while schools in more diverse areas are less homogeneous.

The Impact of Head Coach Race on the Racial Composition of Assistant Coaching Staff

To test H1, a t-test was conducted to compare the proportion of White assistant coaches on the staffs of White head coaches versus Black head coaches. The independent variable is the race of the head coach (White = 1 or Black = 0), and the dependent variable is the percentage of White assistant coaches on the team. The results showed a significant difference in the proportion of White assistant coaches between White and Black head coaches, $t(28) = -3.12$, $p < .01$. The results indicated that White head coaches had a significantly higher proportion of White assistant coaches ($M = 62.13$, $SD = 14.81$) compared to Black head coaches ($M = 36.13$, $SD = 20.41$), supporting H1.

To test H2, similarly, a t-test was conducted to compare the proportion of Black assistant coaches on the staffs of Black head coaches versus White head coaches. The independent variable is the race of the head coach (White or Black), and the dependent variable is the percentage of Black assistant coaches. The results showed a significant difference in the proportion of Black assistant coaches between Black and White head coaches, $t(28) = 2.89$, $p = .01$. The results shown in Table 1 indicated that Black head coaches had a significantly higher proportion of Black assistant coaches ($M = 56.38$, $SD = 15.89$) compared to White head coaches ($M = 32.23$, $SD = 15.49$), supporting H2.

The Impact of Community Diversity and Perceived Community Expectations

To test H3 and H4, a series of Pearson correlation and regression analyses were conducted. The results of Pearson correlation tests showed significant positive relationships between coaching staff diversity and perceived community expectations ($r = .48$, $p < .01$); community diversity ($r = .51$, $p < .001$).

Additionally, a regression analysis was conducted, which found that perceived community expectations ($B = .37$, $t(27) = 2.32$, $p = .03$) and campus diversity ($B = .41$, $t(27) = 2.57$, $p < .05$) significantly predicted coaching staff diversity, $F(2, 27) = 8.32$, $p < .01$, explaining 38.1% of the variance in staff diversity ($R^2 = .381$). These results support Hypothesis 3, demonstrating that stronger perceived community expectations for racial or demographic alignment led to more diverse coaching staffs. The analysis also shows that communities with a higher proportion of minorities tend to have more racially and ethnically diverse coaching staffs, supporting H4.

Moderating Effect of Campus Diversity

To test the moderating effect of campus diversity (student population diversity) on the relationship between homologous reproduction and coaching staff diversity (H5), we conducted a moderation analysis using Hayes' PROCESS Model 1 with 5,000 bootstrapping iterations (Hayes, 2012). The independent variable was homologous reproduction (percentage of coaching staff who resemble the head coach), the dependent variable was coaching staff diversity (percentage of minority coaches), and the moderator was the percentage of minority students on the campus.

The analysis revealed a statistically significant direct negative effect of homologous reproduction on coaching staff diversity, *Effect* = -0.48, *SE* = 0.14, $t = -3.50$, $p < .001$, 95% CI [-0.76, -0.20]. As the level of homologous reproduction increased, the racial and ethnic diversity of the coaching staff decreased.

The moderation analysis also tested the influence of community student diversity on the relationship between homologous reproduction and coaching staff diversity. The results indicate that

the moderating effect of student diversity was significant, with the effect of homologous reproduction varying depending on the level of student population diversity. When student diversity was low, the negative effect of homologous reproduc

tion on coaching staff diversity was significantly stronger, *Effect* = -1.16, *SE* = 0.19, *t* = -6.15, *p* < .001. When student diversity was high, the effect of homologous reproduction on coaching staff diversity was not statistically significant, *Effect* =

Figure 1

Interaction Effects of Campus Diversity and Head Coach Race
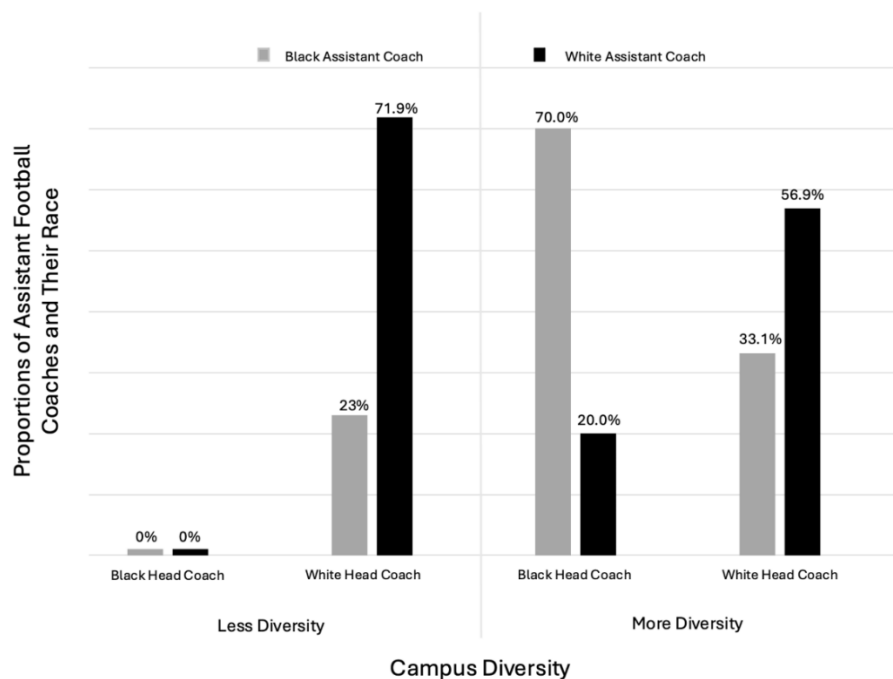
0.20, *SE* = 0.25, *t* = 0.82, *p* = 0.42.

As shown in Figure 1, these results suggest that the relationship between homologous reproduction and coaching staff diversity is moderated by the diversity of the student population in the community. Specifically, in communities with lower student diversity, the negative effect of homologous reproduction is more pronounced, meaning that in less diverse communities, head coaches are more likely to hire racially homogeneous staffs. However, in communities with higher student diversity, homologous reproduction has no significant effect on coaching staff diversity, indicating that in more diverse environments, the tendency to

hire staff similar to oneself may be mitigated.

5. Discussion

The findings of this study offer significant insights into the influence of community and campus diversity on collegiate football coaching staff composition, with direct implications for the theory of homologous reproduction. By exploring the relationships between community demographics, head coach race, and coaching staff diversity, this study confirms and extends existing theoretical frameworks while revealing important moderating effects of external factors. This study also exposes the underrepresentation of minorities in positions

of power throughout the entire world of sports.

The Impact of Community Diversity on Collegiate Football Coaching Staff Composition

Our results for RQ1 demonstrated a significant positive correlation between community diversity and coaching staff diversity, as well as a clear difference between schools in more diverse versus less diverse communities. The analysis revealed that schools located in communities with higher minority populations tend to have more racially and ethnically diverse coaching staffs compared to those not located in diverse areas. This finding aligns with previous literature suggesting that external community demographics play a critical role in shaping organizational hiring practices (Cunningham & Sagas, 2005).

This result expands upon the theory of homologous reproduction, which traditionally emphasizes internal dynamics—namely, the tendency for individuals in positions of power to hire others who resemble them demographically (Kanter, 1977). However, our findings suggest that external social factors, such as the racial composition of the local community, can counteract or moderate this tendency. The community's diversity appears to exert external pressure on coaching staff hiring practices, encouraging more inclusive hiring in diverse areas. This supports the notion that community expectations influence organizational behavior, challenging the homogeneity typically associated with homologous reproduction.

The Impact of Head Coach Race on the Racial Composition of Assistant Coaching Staff

Consistent with H1 and H2, our findings reveal that head coaches who are White tend to hire a higher proportion of White assistant coaches, while Black head coaches hire more Black assistant coaches. These results provide strong support

for the theory of homologous reproduction: head coaches in positions of power tend to replicate their own demographic characteristics in their hiring decisions (Cunningham & Fink, 2006; Lovett & Lowry, 1994).

This confirms earlier research showing that head coaches, when given the authority to hire, often replicate their own race within their coaching staff (Cunningham & Sagas, 2005). The higher proportion of Black assistant coaches under Black head coaches, as seen in our study, illustrates that this dynamic applies to minority leaders as well. However, it is worth noting that despite the positive effects of minority leadership in hiring more diverse staffs, Black head coaches remain significantly underrepresented overall. This suggests that while homologous reproduction is a powerful force, broader systemic barriers still limit access to leadership roles for minority coaches in the entirety of the sports industry. This includes all professional and minor league teams, divisions, sports, levels, and categories.

The Influence of Community Expectations on Coaching Staff Diversity

The results for H3 and H4 further demonstrate the significant role of perceived community expectations and local demographics in influencing coaching staff diversity. The positive correlations between community diversity and coaching staff diversity, as well as the predictive role of perceived community expectations, suggest that external social forces exert considerable influence on hiring decisions. This aligns with existing theories that external pressures from local communities can influence organizational practices (Cunningham & Fink, 2006).

These results expand the theory of homologous reproduction by introducing community demographics as a factor when influencing hiring

decisions in collegiate athletics. While the theory emphasizes the internal dynamics of hiring based on demographic similarity, our findings suggest that external pressures, such as the demographic makeup of the community and community expectations, can significantly alter or mitigate this process. In diverse communities, coaches may feel compelled to hire staff who reflect the racial and ethnic composition of the local area, thus aligning their hiring practices with broader social expectations. This external influence challenges the internal biases suggested by homologous reproduction, highlighting a more dynamic interaction between internal decision-making and external social forces.

Moderating Effect of Campus Diversity on Homologous Reproduction

The moderation analysis for H5 provides further evidence that external factors, particularly campus diversity, can weaken the effects of homologous reproduction. The analysis revealed that in environments with higher campus diversity, the tendency for head coaches to hire staff similar to themselves is significantly reduced. In contrast, in less diverse environments, the negative effect of homologous reproduction on coaching staff diversity is more pronounced.

These findings offer critical insights into the conditions under which homologous reproduction operates. While the theory traditionally suggests that demographic homogeneity is perpetuated by those in positions of power (Kanter, 1977), the presence of a diverse campus environment can disrupt this tendency. This aligns with research indicating that diversity initiatives and institutional commitment to inclusivity can alter hiring practices (Phillips-Morrow et al., 2000). Our results suggest that in more diverse environments, head

coaches may feel pressure to align their hiring practices with the values of inclusivity and representation, thereby weakening the influence of homologous reproduction. So while this research specifically focuses on NCAA Division II Football and NCAA Division I Football, the theory of homologous reproduction is found in many other scenarios throughout sports as well. Other scenarios include more men coaching women's teams and hiring other men on the coaching staff, women attempting to coach more women's teams and hiring other women on the coaching staff, or maybe specific genders coaching a specific sport due to stereotypes of that sport.

Theoretical and Practical implications

Theoretically, this study provides robust support for the foundational principles of the theory of homologous reproduction, while simultaneously extending its scope by highlighting the influence of external social dynamics. The original theory, which emphasizes internal hiring biases—where individuals in power tend to hire others who share similar demographic traits—was strongly corroborated by the findings related to the racial composition of coaching staffs. In particular, the study confirms that head coaches, whether White or Black, tend to hire assistant coaches who mirror their own racial background, reinforcing the core notion of demographic homogeneity within organizations.

However, this research also introduces key modifications to the theory by identifying the significant moderating role of external factors, such as community and campus diversity. The results demonstrate that the influence of homologous reproduction can be either reinforced or weakened by the surrounding social environment. Specifically, in more diverse communities or on camp-

uses with a high representation of minority students, the tendency toward demographic homogeneity is mitigated. Conversely, in less diverse environments, the effects of homologous reproduction are more pronounced, leading to greater homogeneity within coaching staff.

This expanded theoretical perspective suggests that homologous reproduction is not a static, internal process but one that is influenced by broader social forces. These findings challenge the traditional understanding of the theory by showing that organizational practices are not only influenced by internal decision-making but are also susceptible to external pressures. As such, future theoretical models of homologous reproduction should integrate the role of community and institutional diversity, acknowledging how these external dynamics interact with internal hiring tendencies to make the overall composition of organizational teams.

The practical implications of this study are particularly relevant for organizations seeking to foster diversity and inclusivity within their football team. In the context of collegiate athletics, as well as broader organizational settings, the findings highlight the importance of cultivating diverse environments—both on university campuses and within the surrounding communities—to promote more inclusive hiring practices.

Institutions located in racially and ethnically diverse communities are better positioned to counteract the effects of homologous reproduction. These institutions can leverage their community's demographic diversity to promote more inclusive hiring practices, aligning the composition of their coaching staff with the values and expectations of the local population. The same principle applies to universities that prioritize campus diversity. A diverse student body creates a social environment that naturally encourages more inclusive hiring

decisions, thereby reducing the tendency for homogeneity in coaching staff and other organizational units.

Moreover, these findings have direct implications for the design and implementation of diversity initiatives within collegiate athletics. Athletic departments and university administrators can use these insights to develop policies and programs that actively counteract the internal biases associated with homologous reproduction. By fostering diverse environments and engaging with external social dynamics, institutions can ensure that their diversity initiatives are more effective and better aligned with both internal goals and community expectations.

Additionally, these insights extend beyond collegiate athletics and can be applied to a range of organizational contexts. External social factors, such as community demographics and institutional diversity, can be strategically leveraged to promote inclusivity and representation within organizations. This approach can help create a more equitable workplace by addressing both internal biases and external pressures, leading to more balanced hiring practices and greater organizational diversity, not only in the sports industry, but in the entire world as a whole.

Limitations and Future Research Direction

While this study advances understanding of diversity in collegiate athletics, it has certain limitations. The reliance on quantitative methods excludes qualitative insights that could provide a deeper understanding of decision-making processes. Additionally, the focus on football programs in the NCAA Division I and II may limit generalizability to other contexts.

Future research should expand the scope of this study by examining diversity in hiring practices across a broader range of sports, including

women's and non-revenue sports, as well as across different levels of competition such as Division III and professional leagues. Longitudinal studies would be valuable in tracking changes in coaching staff diversity over time, providing insights into how shifts in community demographics or institutional diversity initiatives impact hiring practices. Additionally, exploring intersectionality in hiring decisions—considering how race, gender, socioeconomic status, and other demographic factors interact—could deepen understanding of how multiple identities influence opportunities in collegiate sports leadership. Research should also assess the effectiveness of institutional diversity policies in reducing the impact of homologous reproduction, offering practical recommendations for fostering inclusivity. Furthermore, future studies could explore regional and cultural differences in hiring dynamics, comparing how rural, urban, and international contexts shape the relationship between community diversity and coaching staff composition. Lastly, examining the role of implicit bias in hiring decisions could provide insights into how unconscious preferences affect diversity outcomes, leading to potential interventions to mitigate these effects.

There is opportunity to further research discussion by possibly looking more into the diversity of a team compared to a coaching staff, dependent upon the sport and location of the school. For example, do White male coaches tend to recruit more White athletes or more Black athletes for a sport that may be heavily influenced by one or more races in a less diverse or more diverse area? Or do coaches only recruit players based on their athletic and human decency ability, instead of categorizing them as people based on what they look like?

There may be similarities and differences of all these factors combined, but it is only a matter of fully taking a dive to discover the thoughts and processes behind them.

6. Conclusion

This study provides critical insights into the dynamics of diversity within collegiate football coaching staffs, highlighting the role of homologous reproduction and the moderating effects of external factors such as community and campus diversity. The findings confirm that head coaches tend to hire assistant coaches who share their racial background, a phenomenon that reinforces homogeneity. However, the study demonstrates that institutions in diverse communities or with diverse student populations can mitigate this effect, promoting more inclusive hiring practices.

These results underscore the importance of addressing both internal biases and external social pressures in fostering diversity within athletic departments. By leveraging community and campus diversity, universities can align their hiring practices with broader inclusivity goals, ultimately enriching the organizational culture and reflecting the values of their student body and surrounding community

REFERENCES

Chatman, J.A., & Flynn, F.J. (2001). The influence of demographic heterogeneity on the emergence and consequences of co-operative norms in work teams. *Academy of Management Journal*, *44*(5), 956-974. https://doi.org/10.2307/3069440.

Cunningham, G.B. (2004). Strategies for transforming the possible negative effects of group diversity. *Quest*, *56*, 421-438. https://doi.org/10.1080/00336297.2004.10491835.

Cunningham, G.B. (2008). Commitment to diversity and its influence on athletic department outcomes. *Journal of Intercollegiate Sport, 1,* 176-201. https://doi.org/10.1123/jis.1.2.176.

Cunningham, G.B. (2009). Understanding the diversity-related change process: A field study. *Journal of Sport Management, 23*, 407-428. https://doi.org/10.1123/jsm.23.4.407.

Cunningham, G.B., & Fink, J.S. (2006). Diversity issues in sport and leisure. *Journal of Sport Management, 20*, 455-465. https://doi.org/10.1123/jsm.20.4.455.

Cunningham, G.B. & Sagas, M. (2004). Racial differences in occupational turnover intent among NCAA division IA assistant football coaches. *Sociology of Sport Journal*, *21*, 84-92.

Cunningham, G.B. & Sagas, M. (2004). The effect of group diversity on organizational commitment. *International Sport Journal*, *47*, 124-131. https://doi.org/10.1123/ssj.21.1.84

Cunningham, G.B. & Sagas, M. (2005). Access discrimination in intercollegiate athletics. *Journal of Sport and Social Issues*, *29*(2), 148-163. https://doi.org/10.1177/0193723504271706.

DeSensi, J.T. (1994). Multiculturalism as an issue in sport management. *Journal of Sport Management*, *8,* 63-74. https://doi.org/10.1123/jsm.8.1.63.

Doherty, A.J. & Chelladurai, P. (1999). Managing cultural diversity in sport organizations: A theoretical perspective. *Journal of Sport Management*, *13*, 280-297. https://doi.org/10.1123/jsm.13.4.280.

Ely, R.J., & Thomas, D.A. (2001). Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, *46*(2), 229-273. https://doi.org/10.2307/2667087.

Fink, J.S. & Pastore, D.L. (1999). Diversity in sport? Utilizing the business literature to devise a comprehensive framework of diversity initiatives. *Quest*, *51*, 310-327. https://doi.org/10.1080/00336297.1999.10491688.

Fink, J.S., Pastore, D.L. & Reimer, H.A. (2001). Do differences make a difference: Managing diversity in division IA intercollegiate athletics. *Journal of Sport Management, 15*, 10-50.

https://doi.org/10.1123/jsm.15.1.10.

Girginov, V., Papadimitriou, D. & Lopez De D'Amico, R. (2006). Cultural orientations of sport managers. *European Sport Management Quarterly*, *6*(1), 35-66. https://doi.org/10.1080/16184740600798347.

Gummer, B. (2002). The socio-cultural context of organizational behavior. *Administration in Social Work, 26*(3), 71-88. . https://doi.org/10.1300/J147v26n03_05.

Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf

Kanter, R. M. (1977). *Men and Women of the corporation.* Basic Books. 10.2307/590086.

Kirkman, B.L. & Shapiro, D.L. (2001) The impact of cultural values on job satisfaction and organizational commitment to self-managing work teams: The mediating role of employee resistance. *Academy of Management Journal*, *44*(3), 557-569. https://doi.org/10.2307/3069370.

Lapchick, R. (2010). The effect of the economic downturn on college athletes and athletic departments on issues of diversity and inclusion. *Journal of Intercollegiate Sport, 3,* 81-95. https://doi.org/10.1123/jis.3.1.81.

Lapchick, R. (2009). Racial and gender report card. https://www.gannett-cdn.com/usatoday/editorial/sports/2016-college-sport-racial-gender%20-report-card.pdf.

Lapchick, R. (2023). College sports leadership again earns poor grades for racial, gender hiring practices. https://www.espn.com/college-sports/story/_/id/35719577/college-sports-leadership-again-earns-poor-grades-racial-gender-hiring-practices.

Lovett, D.J. & Lowry, C.D. (1994). Good old boys and good old girls clubs: Myth or reality. *Journal of Sport Management, 8*, 27-35.https://doi.org/10.1123/jsm.8.1.27.

Milliken, F.J. & Martins, L.L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, *21*, 402-433. https://doi.org/10.5465/amr.1996.9605060217.

Norman, L. (2010). Feeling second best: Elite women coaches' experiences. *Sociology of Sport Journal, 27*, 89-104. https://doi.org/10.1123/ssj.27.1.89.

Phillips-Morrow, G., Burris-Kitchen, D. & Der-Karabetian, A. (2000). Assessing campus climate of cultural diversity: A focus on focus groups. *College Student Journal, 34*(4), 589-602. https://psycnet.apa.org/record/2001-16502-009.

Reed, S. (2022). Study: percentage of Black

college coaches remains low. https://ap-news.com/article/nfl-sports-business-football-race-and-ethnicity-19555 f4f4a 67592 c57a ece8d5b39fdd3.

Rivera, R. (2016). The Perceived Community Engagement Survey: Structure, Reliability, and Validity of a Community based Organization Measure of Engagement with the Broader Community. Disserations, 152. https://digitalcommons.nl.edu/diss/152

Sagas, M., Paetzold, R. & Ashley, F. (2005). Relational demography in coaching dyads. *Physical Educator*, *62*(2), 103-112. https://eric.ed.gov/?id=EJ740140.

Taylor, T. & Toohey, K. (1999). Sport, gender, and cultural diversity: Exploring the nexus. *Journal of Sport Management*, *13*, 1-17. https://doi.org/10.11 23/jsm .13.1.1.

Tritschler, K. (2008). Cultural competence: A 21st-century leadership skill. 10.1080/ 07303084.2008.10598107.

Watson, W.E., Kumar, K. & Michaelson, L.K. (1993). Cultural diversity's impact on interaction process and performance: Comparing homogenous and diverse task groups. *Academy of Management Journal, 36*(3), 590-602. 10.5465/2 56593.