An examination of influences on hiring practices used to select head coaches in the National Football League from 1991 to 2010

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Human resources are vital in a firm gaining and sustaining a competitive advantage (Barney, 1991). As the principal figure of the company, managers are imperative to organizational performance and should be selected with the utmost scrutiny. In making a selection, a candidate’s prior success, education, and experience must be evaluated to determine if they are capable of performing the intended job (Kristof-Brown, 2000). This is used in assessing the knowledge, skills, and abilities of the applicant. Therefore, one of the main objectives of human resources is to select the individual whose skill set best coincides with organizational goals and needs (Wright, McMahan, & McWilliams, 1994). As a for-profit business, National Football League (NFL) teams are no different and should practice these same sound hiring behaviors in choosing a head coach to lead their franchise. In the NFL, the head coach is the one of the most influential employees of the club and is seminal in reaching the goals of the organization effectively acting as the manager of the team. The central goal of each team is defined as winning games, and thus is used as the yardstick in measuring a coach’s job performance (Latham & Stewart, 1981). Any unsuccessful season brings about whispers of an opportunity to replace the coach to induce change within the organization (Ndofor, Priem, Rathburn, & Dhir, 2009). In this highly competitive environment, coaches are often held on a short leash, with an average expected tenure of just over four years (Scully, 1994). When choosing a successor, teams should select the head coach that best complements the resources of the organization (Barney, 1991). However, some knowledgeable figures in sports have stated that the NFL is a league of copycats, with teams duplicating the practices of more successful franchises in terms of personnel decisions (head coaches), coaching strategies (formations), and roster management (positional utilizations). The study will therefore test for similarities in head coaching hires, looking into possible explanations of homogeneity in the
population of coaches by studying the hiring patterns of this time period. This will help us
determine if teams exhibit fundamental human resources behavior or make decisions that may be
detrimental to the team, perhaps attributed to some source of organizational isomorphism.

Operational Definitions

Manager: The manager is the individual responsible for overseeing activities of the firm and
supervising the people of the organization (Nelson & Quick, 2006). They effectively act as
the implementer of business strategies and the decision maker of the firm. In the case of the
NFL, the manager is defined as the head coach. The coach serves as the supervisor of the
players, runs day-to-day operations, and designs and administers the strategies of the team.

Isomorphism: The phenomenon in which organizations develop homogeneous characteristics over
time (Astley, 1985; DiMaggio & Powell, 1983; Hannan & Freeman, 1977, Hawley, 1950;
Meyer & Rowan, 1977; Oliver, 1988). Isomorphism will be determined by examining the
average coaching credentials and demographic information of the subdivisions of the
coaching population. The groups will consist of new hires, successful coaches, and
unfavorably performing coaches.

New Hires: Coaches that are hired before the start of the season are considered to be a “new hire”
for this study. This may include coaches that were promoted during the previous season and
kept the position, but will not extend to interim coaches that did not retain the job.

Upper-Tier Coaches: Each season we select the six most successful teams in terms of winning
percentages and post-season achievements, and categorize the respective coach as a
“successful coach.” Conference Championship participants are automatically put into this
group, with the two remaining teams chosen solely off of regular season winning
percentage.
**Lower-Tier Coaches:** This category consists of the remaining incumbent coaches of the season. This would include all coaches who began the season in the same position but did not qualify for the “successful coaches” grouping.

**Limitations**

The study was unable to include salary data (a recognized independent variable) when examining factors that could influence the hiring process. Therefore, one’s salary is an extraneous variable that could not be controlled in this investigation. Because a team’s financial position and economic conditions may have some bearing on hiring practices, “more” qualified individuals -- veteran coaches with valid experience and prior success in the league -- may come at a higher cost than selecting a “lesser” qualified coach. Until salary statistics become readily available to the public, any attempts to acquire said data may prove to be a futile exercise.

**Review of Literature**

**Organizational Isomorphism**

Isomorphism is a process in which organizations develop similar characteristics over time (Astley, 1985; DiMaggio & Powell, 1983; Hannan & Freeman, 1977, Hawley, 1950; Meyer & Rowan, 1977; Oliver, 1988). There are three paradigms that may explain this observed homogeneity. Environmental constraints are believed to be one of the possible determinant that pressure NFL teams to make like decisions (Astley, 1985; Hannan & Freeman). Another theoretical explanation may be in that the relationships amongst teams that influence the behavior in the league (DiMaggio & Powell). The final theory presumes decisions emerge solely as the strategic choice of management itself (Child, 1972; Hrebinia & Joyce, 1985; Hambrick & Finkelstein, 1987; Oliver). All three theories ascertain that organizations develop similar attributes in the interest of survival (Hannan & Freeman), gaining acceptance and legitimacy (DiMaggio & Powell), or improving its
competitive position (Oliver). Therefore, we have an opportunity to examine the theories of population ecology, institutionalism, and strategic choice to better understand hiring practices, and especially, how it is relevant to the NFL.

*Population Ecology*

The main idea of population ecology is that organizations that face the same environmental constraint become homogeneous due to competition for resources that are scarce (Hannan and Freeman, 1977). In the case of the NFL, the rare resource would be the availability of quality coaches, with this pool of candidates shrinking as less successful coaches are forced out of the population, causing the remaining candidates to be more and more similar over time.

*Institutionalism*

Unlike the belief in population ecology that isomorphism comes from competition for scarce resources, institutionalism points to the interactions between the population’s constituents in explaining the occurrence of isomorphism (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Becoming similar increases a team’s legitimacy within society by implementing strategies perceived as adequate (Meyer & Rowan). There are three different manifestations of institutionalism that can affect the behavior of the firm. Coercive isomorphism indicates that an organization’s decisions are influenced by conformity to society’s expectations (DiMaggio & Powell, p.150). Mimetic isomorphism occurs when firms imitate more successful ones to reduce risk (DiMaggio & Powell, p.151). Finally, normative isomorphism stems from the fact that coaches may receive similar professional training (DiMaggio & Powell, p.152). Therefore, Greenberg’s assertion of a copycat league suggests a prevalence of institutionalism within this type of business.
Strategic Choice

In comparison with population ecology and institutionalism, which suggest that external forces induce isomorphism, strategic choice suggests that firms are able to use discretion in the direction of their organization, and have the ability to change their strategies in response to past outcomes. This flexibility allows firms to determine how they will attempt to compete with their rivals. With the ability to adapt, organizations can choose to differentiate themselves among competing organizations, leading us to believe that external forces are not the core cause for any observed isomorphism. As a result, competition and interconnectedness may ultimately increase the diversity of organizational characteristics by permitting strategies such as market segmentation or product differentiation (Oliver). This random chance of events could explain the observed homogeneity in the NFL as teams attempt to hire individuals that are unique and complement their available resources (e.g., the players).

Population

The population examined in the study is each individual that held an official head coaching position for an NFL franchise between the 1990 and 2010 seasons. This is limited to subjects who began the season as the head coach, excluding temporary (interim) coaches. This time frame begins with the coaches of the 1990-91 season to be compared with the new hires of 1991 and concludes with the new hires of 2010 to be compared with the coaches of the 2009-10 season.

Methodology

A statistical analysis was performed to test our hypothesis that NFL teams copy successful teams in their hiring process to test the validity of Greenberg’s claim (2009). First, hiring profiles were created to capture the credentials of each head coach that reflect their resume at that a given
point in time. These profiles were made up of eleven variables that effectively represent each subject’s service in various positions, success indicators in these positions, as well as demographic information. Each score (for the variable) was standardized to 0 (low) to 1 (high) to make valid comparisons. These variables are as follows:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCE</td>
<td>Number of head coaching positions held in the NFL</td>
</tr>
<tr>
<td>HCY</td>
<td>Number of years served as a head coach</td>
</tr>
<tr>
<td>CY</td>
<td>Number of years served as an offensive or defensive coordinator</td>
</tr>
<tr>
<td>AY</td>
<td>Number of years served as any other type of assistant coach</td>
</tr>
<tr>
<td>PY</td>
<td>Number of years served as a professional player</td>
</tr>
<tr>
<td>TR</td>
<td>Relative rank of most recently affiliated team</td>
</tr>
<tr>
<td>SB</td>
<td>Super Bowl appearances at any position</td>
</tr>
<tr>
<td>Age</td>
<td>Age of individual</td>
</tr>
<tr>
<td>Race</td>
<td>Is the subject of a minority ethnicity (non-white)? (Y/N)</td>
</tr>
<tr>
<td>JBHC</td>
<td>Did the subject hold a NFL head coaching position before this hire? (Y/N)</td>
</tr>
<tr>
<td>JBA</td>
<td>Did the subject hold a NFL assistant coaching position before this hire? (Y/N)</td>
</tr>
</tbody>
</table>

Utilizing these coaching profiles, each individual was placed into one of three subsets: new hires, upper-tier coaches, and lower-tier coaches for each year. A multiple discriminant analysis (MDA) was used to determine group centroids for each of the three groups, respectively. An analysis of variance (ANOVA) was then used to determine differences amongst the group. In addition, the average distances between the upper- and lower-tiered versus the distance between the new fire and upper-tiered coaches were compared using a Student’s T-Test. Using these findings, we could determine influences in hiring decisions. If the average profile of the new hires most
closely resembles that of the coaches for upper-tier teams, then it would possible confirm the 
aforementioned copycat behavior within the league and suggest a presence of institutionalism 
affecting NFL teams in hiring decisions. This would imply that teams are seeking out candidate’s 
that most closely exemplify the characteristics of the successful coaches in the league. Population 
ecology could be supported as an explanation of isomorphism within the league in the event that all 
three profile sets are equal distance from one another, suggesting that teams are forced to employ 
like coaches due to environmental constraints. A third possibility is that the upper-tier and lower-
tier coaches — the incumbents — are significantly different from the new hires for any given year. 
This could suggest that teams are exercising a strategic choice, irrespective of environmental forces, 
in selecting a coach. Further, teams are strategically choosing to go in a new direction from what 
others have done in the past, although similar candidates were available at the time of hire.

Results/Conclusion

In comparing average profile distances amongst groups, we found the distance between new 
hires and upper-tiered coaches to be significantly greater than that of the distance between upper-
tiered and lower-tiered coaches (See Table 1). This shows that incumbent coaches were more alike 
than when compared to new hires. Given these results, it appears that copycat behavior does not 
influence the hiring process. While this may be true for some individuals, one must look at the 
collective group of newly hired coaches rather than isolating a few select cases. Furthermore, our 
findings demonstrate that all three groups were statistically different when comparing average 
centroid means (See Table 2). This could imply that strategic choice is used throughout the league 
when selecting a head coach.


<table>
<thead>
<tr>
<th>Distance</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.336</td>
<td>1</td>
<td>.366</td>
<td>20.878</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>.666</td>
<td>38</td>
<td>.018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.033</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Comparison of centroid differences between new hires/upper-tiered coaches and lower-/upper-tiered coaches (n=20)

<table>
<thead>
<tr>
<th>Distance</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>150.939</td>
<td>2</td>
<td>75.470</td>
<td>41.336</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>103.993</td>
<td>57</td>
<td>1.824</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>254.932</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Comparison of average centroid distances between new hires, upper-tiered coaches, and lower-tiered coaches (n=20)

In place of a prevalence of institutionalism affecting coaching selection, our results indicate that the decision of who to hire at head coach may reflect a strategic choice of the organization, undeterred by outside forces. If this is true, teams hire unlike coaches to differentiate themselves from other teams. However, we also found that this population becomes more homogeneous over time. This may be attributed to unique coaches that are diversifying the new coach cohort are subsequently being removed from the population soon after. More research must be done to examine the impending success of dissimilar coaches in comparison with those closest to the average, to better understand if there are differences between their performance and tenure patterns.

To further investigate the potential interconnectedness of the population, a social network analysis will be utilized to study the structural relationships within the league. This may demonstrate which coaches (and teams) are significant nodes within the league and the source of
future hires. Thus, this interconnectedness may suggest that who one knows or worked for may be a significant factor in the selection of new head coaches. Scrutinizing these major connections will help us better determine if the practice of institutionalism exists within the NFL.