Is Team Based Tacit Knowledge Transferable? Players as Strategic Resources

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The transferability of tacit knowledge is a topic that is at the core of many leading theories of the firm. Using the National Basketball Association (NBA) as the unit of analysis, this paper addresses the following question: What effect does tacit knowledge held by a strategic bundle of resources (team) have on the market value of an individual resource (player)? Results indicate that player fit with other team members and strategic philosophy are significant predictors of market value.

INTRODUCTION

Since Barney's (1991) seminal work on a resource based view (RBV) of the firm much work has been done that provides for the development and implementation of strategic firm resources to realize a sustainable competitive advantage. As the resource based view has evolved and matured, RBV has been utilized in many streams of and different areas of management research. Specifically related to the current research is the area of strategic human capital that is beginning to develop and take shape in strategy as well as human resources (Wright, Coff, & Molterno, 2014).

In the context of the National Basketball Association (NBA), this study examines how the value of an individual human resource (player) is affected relative to the other resources that form a specific bundle (team). This is related to recent works by Crocker and Eckardt (2014) and Campbell, Saxton, & Banerjee (2014). Crocker and Eckardt (2014) used data from Major League Baseball and found that individual level performance was influenced by complementary resources at the unit or team level. Much like the current study, Campbell, Saxton, and Banerjee (2014) considered mobility of human resources (player and personnel) in the NBA and that found that mobility events generally caused performance to be adversely affected.

The use of athletic teams for RBV and strategic human capital research is not uncommon. Work in this area has focused on the relationship between team performance and human resources (Wright, Smart, & McMahan, 1995), program history and culture (Smart & Wolfe, 2000), team tacit knowledge (Berman, Down, & Hill, 2002), and managerial experience (Lechner & Gudmundsson, 2012). Each of these studies found a relationship between the aforementioned independent variables and the dependent variable of team performance. This paper is unique in that it examines the effect that team-possessed tacit knowledge has on the market value of individual members of the team. This offers a different perspective to RBV based research that primarily identifies competitive advantage as the dependent variable.

This paper is organized as follows. First a general review of the foundational literature of the RBV, with particular attention given to human and tacitly held resources of the firm is provided to establish the conceptual background for this study. Next, the RBV is described in terms of the NBA and a set of

hypotheses is offered to examine the relationship between team possessed tacit knowledge and the market value of individual resources. The research framework focuses on players and coaches as the individual human resources that compose a team. The team is viewed as a unique bundle of resources that are all working to maximize team performance. For example, the NBA is composed of unique bundles of resources known as teams (e.g. Los Angeles Lakers, Miami Heat, Chicago Bulls, etc.). Each team is made up of several players (e.g. Kobe Bryant, Lebron James, Kevin Durant, etc.) and coaches (e.g. Doc Rivers, Eric Spoelstra, George Karl, etc.) that all share the same goal of winning basketball games. Next, a methodological section is provided that defines the measures and analyses that are used. Finally, the paper concludes by suggesting the business strategy implications for future empirical and theoretical testing as well as practical applications.

LITERATURE REVIEW

Resource-Based View (RBV)

Wernerfelt simply identified resources as "those tangible and intangible assets which are tied semipermanently to the firm" (1984, p. 172). Barney (1991) further clarifies this definition by classifying resources as being either physical capital resources, human capital resources, or organizational capital resources. This paper focuses on the human capital resources which Barney defines as "the training, experience, judgment, intelligence, relationships, and insight of individual managers and workers in a firm" (1991, p. 101). The RBV attempts to identify resources and/or bundles of resources that firms can leverage to create an advantage that produces supernormal performance over a sustained period of time. In terms of sustainability, Barney contends that "a competitive advantage is sustained only if it continues to exist after efforts to duplicate that advantage have ceased" (1991, p. 102). Furthermore, he contends that for a firm's resource to produce a sustained competitive advantage they must be 1) valuable in that it takes advantage of environmental opportunities and minimizes threats, 2) rare in that few (if any) competitors possess it, 3) imperfectly imitable meaning that other firms cannot easily purchase or imitate it, and 4) non-substitutable meaning that other non-strategic resources can be reapplied to produce similar results (Barney, 1991). It is important to note that each of these criteria must be met. For example, a valuable, rare, and hard to imitate resource will not lead to a sustained competitive advantage as long as substitutes are available.

Peteraf's (1993) analysis of the third criteria (imperfectly imitable) mentioned above is especially relevant to this argument. She suggests that assets that are "cospecialized" (1993, p. 183) are assets that must be used together or are at least most valuable when used together; consequently, the more cospecialized the assets; the more immobile they become (Peteraf, 1993). In this context, a team's specific combination of players and coaches are considered strategic firm resources in that they are cospecialized assets and imperfectly mobile. A degree of immobility can be related to technical issues of player contract restrictions, league salary cap rules, league trading rules, etc., but the focus of this paper is on the imperfect mobility due to the tacit knowledge that is gained through a team playing together over time.

Tacit Knowledge as a Resource

A stream of RBV related literature has grown from the belief that firms realize sustained competitive advantage through the application and evolution of knowledge within the firm. Grant (1996) makes a distinction between tacit knowledge and explicit knowledge. He identifies "*knowing how* with *tacit knowledge*, and *knowing about* facts and theories with *explicit knowledge*" (Grant, 1996, p. 111). In basketball terms, the rules of the game would be considered explicit knowledge; whereas, how to shoot a free-throw or dribble the ball would be considered tacit knowledge. These simple examples also support Grant's contention that knowledge value is realized through 1) its ability to transferred within or across firms, 2) its ability to be absorbed by others, and 3) its appropriability, which is the ability of the owner of the knowledge to receive a return equal to its value (Grant, 1996). In the simple basketball example, transferring ones knowledge of game rules would be relatively simple and therefore, easy to imitate.

Absorption and appropriability would also be relatively simple to achieve. However, transferring one's knowledge of how to dribble or shoot would be much more difficult; consequently, tacitly held knowledge can be viewed as a source of competitive advantage, especially in uncertain and unpredictable environments (Miller & Shamsie, 1996). Berman, Down, and Hill (2002) point out that "at the individual level, tacit knowledge is closely related to the concept of skills" (2002, p. 14). A basketball player uses tacit knowledge when he secures a rebound; dribbles the ball to the opposite end of the court; and executes a slam dunk all the while avoiding defenders. This series of activities is a product of tacit knowledge that is possessed within the individual that is extremely difficult, maybe even impossible, to document and teach others to execute.

At the group or team level, the individually held tacit knowledge of all members is combined to create team-based tacit knowledge. Cohen and Levinthal (1990) point out that although team-based knowledge "tends to develop cumulatively" (1990, p. 131) it is not the sum of the team member's knowledge that is the major issue. The major component of team-based knowledge is the team's ability to exploit the collective knowledge of its members (Cohen & Levinthal, 1990). Teece, Pisano, and Shuen (1997) support this by stating, "While individual skills are of relevance, their value depends on their employment in particular organizational settings" (1997, p. 520). The contextual value of the knowledge possessed by a bundle of resources is well documented in the literature. Pandian and Mahoney (1992) suggest that firms generate rents not due to the possession of better resources, but due to making better use of the resources they do possess. In her analysis of imperfectly mobile resources, Peteraf (1993), describes resources such as this as "tradeable but more valuable within the firm that currently employs them than they would be in other employ" (1993, p. 183). These arguments implicitly suggest that the sum is greater than the whole and is specific and unique to the context in which it is applied. Hall (1992) clarifies this stance, "Even when one firm acquires another for the purpose of duplicating a competitive advantage creating resource, the acquiring firm cannot be certain that (it) will retain the intangible resources of know-how, culture, or networks (1992, p. 136).

In the context of this paper, it could be reasoned that just because a player performs at a certain level in the context of their current team, there is no guarantee that they will realize the same level of performance with a different team. In short, the team (resource bundle) is more important than any individual player (single resource).

THEORETICAL FRAMEWORK

A theoretical framework and hypotheses are developed in this section to explain the degree that the relationship between team based tacit knowledge and player market value is enhanced by the performance of the team to which it is a member. Specifically, team based tacit knowledge is operationalized as the level of experience of the individual members of the team, the performance of unique combinations of team members, and fit (or lack of) between the strategic philosophies of the team and the valuable skills of individual players.

One previous athletic focused study examined the relationship between intangible assets (history, trust, and organizational culture) and performance of a collegiate football program (Smart & Wolfe, 2000), while another focused on the relationship between tacit knowledge and performance of NBA basketball teams (Berman, Down & Hill, 2002). Both studies found that the strength of the intangible assets studied was directly related to the performance of the organization.

Experience and Resource Combinations

In the NBA, team-based tacit knowledge is developed by members of a team playing together and becoming aware and comfortable with the individually held tacit knowledge of each member. In a sense, organizational learning is a product of teams playing together. "As players interact on the same team over time, they increase team performance and perhaps build a competitive advantage through group-level tacit knowledge" (Berman, Down, & Hill 2002). This increase in team-based tacit knowledge was found to lead to an increase in team performance (Berman, Down, & Hill, 2002). These team effects are a product

of the increased tacit knowledge and level of performance of the individual players on the team that is a product of each individual's experience on the team and the specific interactions of various team member combinations. Cohen and Levinthal support this "an organization's absorptive capacities depends on the absorptive capacities of its individual members" (1990, p. 131).

Based on these arguments a logical conclusion can be reached that as the level of team-based tacit knowledge increases in the form of experience or the specific and unique combination of players on the team so will the tacit knowledge of the individual. And, as a result, the performance of the team as well as the individual players will increase. Consequently, as a player's performance increases, their market value will also increase, meaning they will be able to demand a higher wage in the free-agent market (Vrooman, 1995; Gerrard, 2005).

Hypothesis 1: Team-based tacit knowledge in the form of experience is positively related to the market value of an individual member of the team.

Hypothesis 2: Team based tacit knowledge in the form of the performance of specific combinations of players is positively related to the market value of an individual member of the team.

Strategy/Capability Fit

The strategic philosophies of teams and their coaches can have an effect on the types of players the team seeks to acquire through free agency or the draft (Wright, Smart, & McMahan, 1995). This is especially the case in basketball due to the fact that "there is a general consensus regarding the strategies a team might pursue" (Wright, Smart & McMahan, 1995, p. 1058) and these different strategies would most likely value different characteristics of human resources. For example, one team may choose to implement a fast-paced strategy that focuses on offense; whereas, another team may choose to implement a strategy that focuses on power and defense. Fast-paced teams would likely value characteristics of shooting, ball handling, stamina, and quickness; whereas, power-minded teams would be more interested in characteristics of size, strength, and rebounding.

Based on these arguments, one can conclude that players that have previous experience implementing a certain strategic philosophy will more easily be able to transfer their tacit knowledge to a new team that employs a similar strategy. Further evidence for this can be found in the upper echelons literature (Hambrick & Mason, 1984; Finklestein & Hambrick, 1990; Carpenter, Sanders & Gregersen, 2001). This stream of literature theoretically and empirically suggests top managers are more attractive and valuable in the labor market when they have experience implementing strategic philosophies that are somewhat congruent with other firms in the industry. In this context, one could surmise that those players with experience in similar strategies will be able to demand a higher wage from teams with similar strategic philosophies.

Hypothesis 3: Team-based tacit knowledge in the form of strategic-philosophy/player-skill fit is positively related with the market value of an individual member of the team.

METHODS

One of the benefits of using the NBA as the unit of analysis is the vast amount of readily available data. By its nature, sports are grounded in statistics and provide a laboratory of sorts for empirical research.

Sample

The population consists of the 450 players that played on 30 (each team has a 15 player roster) teams in the NBA during the 2005-2006 and 2006-2007 seasons. This period was selected due it being in the middle of the dataset. By utilizing a period in the middle of the dataset, the potential to establish and

include a longitudinal component to this research is possible. This represents the entire population of players and teams. The sample for this study is those players that were members of more than one team during the time period. 76 players changed teams during the time frame studied. This makes up the sample for the study. Data was gathered from the NBA's official website (http://www.nba.com). This sample size yields approximately at 25:1 ratio of cases to predictors. This is very close to the preferred ratio of 30:1 and should be sufficient for this study.

It should be noted that each of these teams are sanctioned and governed by the NBA. This means that each of these teams follow the same rules of competition. For example, each team can only utilize five players at any one time during a game, and each game is officiated by league-employed referees that have no prior allegiance to any one team. The fact that each team is governed by the same rules should increase the validity of this study.

Measures

Independent Variables

Three measures were used for team tacit knowledge. The first measure of team tacit knowledge is team experience. This is a continuous variable and has been established as a proxy for team tacit knowledge in the literature (Berman, Down, & Hill, 2002). This variable consists of the number of years of experience that each player has with the team at the end of the season. Experience is weighted by the number of minutes played during the season. This variable is calculated by multiplying the number of years that a player was a member of the team he left in 2005-2006 by the number of total number of minutes that he played in games during his final season with the team. For example, if player A was a member of Team X for four seasons and in his fourth season he played 1800 minutes, his team experience would be 4 x 1800 = 7200 (See Berman, Down, & Hill, 2002 for further description of this variable). I argue here that the larger a player's experience, the greater his market value will be.

The second measure of team tacit knowledge is also a continuous variable and is the NBA developed Lenovo Statistic. The NBA explanation of the Lenovo Statistic: "The Lenovo Stat shows the power of teamwork. It's a way of showing the best-engineered/best combination of players on the court. The Lenovo Stat is a plus/minus statistic that looks at the point differential when players are both in and out of the game, to see how the team performs with various combinations. The Lenovo Stat can look at a variety of combinations – including the best two player, three player and even five player combinations for each game" (http://www.nba.com). At the individual level, the Lenovo Statistic measures the amount that an individual contributes to their team. Positive Lenovo values indicate that a team's performance increases when an individual is in the game, contributing to the team; conversely, negative Lenovo values indicate that the team's performance decreases when an individual is in the game. The strength, either positive or negative, indicates the magnitude of an individual player's contribution. It should be noted that a negative Lenovo Statistic does not necessarily mean that an individual player performs poorly. It could indicate that the player simply does not perform as well as other players. I argue here that the more positive an individual player's Lenovo Statistic; the more valuable they will be.

The third independent variable is the match between an individual player's strength in terms of style of play and the strategic philosophy of the team that he went to play for in 2006-2007. Three raters with considerable knowledge of the NBA and its players independently categorized each of the 30 NBA teams and the 76 players in the sample as either as either 1) transition focused – meaning they support the notion of fast-past offense where players are expected to score as quickly and as often as possible; 2) half-court focused – meaning the offense is focused on running set plays where players are expected to maximize the amount of time used and take the best shot; or 3) defense focused – meaning that the team is primarily focused on preventing the other team from scoring and players are less interested in scoring points as they are with steals, deflections, and blocked shots. Inner-rater reliability was considered and determined not to be a concern. There were only two discrepancies in the team categorization and 6 in the player categorization and were easily resolved through a brief discussion. Players' styles were then compared with the strategic philosophies of the teams that they were to be playing for in 2006-2007. This variable is

categorical or nominal and is coded as 0 for instances where no match was found, and coded as 1 for instances when a match between player style and team strategic philosophy was found.

Dependent Variables

The dependent variable in this study is a player's market value. Two measures are used to represent a player's market value. Both measures are interval or continuous in nature. The first measure of player market value is the change in the value of the player's contract from the 2005-2006 season to the 2006-2007 season. Data for this measure was taken from the *ESPN's* Basketball Salaries Database (http://espn.go.com/nba/salaries). This database contains historical salary data for the NBA (1999-2013).

The second measure for player value is the change in attendance of the team the player left in the 2005-2006 season and the change in attendance of the team they joined in the 2006-2007 season. One would expect a team that has a valuable player leave will experience a decrease in attendance in the year after the departure. Likewise, it would be expected that the arrival of a valuable player to a team would result in an increase in that team's attendance. This data was collected through the NBA's official website (http://www.nba.com).

Analysis

Descriptive statistics and correlation results are provided to illustrate the general relationships between the variables. Multivariate multiple regression is the primary statistical method used to address the research question in this study. Tests of significance were conducted on the overall model and each individual predictor. To determine the best model relative to the seven different combinations of the predictors, separate analyses were run of the independent variables and compared based on each model's adjusted R^2.

RESULTS

Table 1 includes descriptive statistics and correlations. As shown in Table 1, the standard deviations of the variables are rather large. This is especially true for the salary change variable. The large standard deviation value in this variable is likely due to fact that several of the players included in this sample were traded from one team to another in the midst of a current contract. Often times when a player is traded and there is time remaining in the contract, the acquiring team will honor the terms of the player's current contract, meaning that there is no change in the value of the contract.

It is also worth noting that the significant positive correlation between the Lenovo Statistic and experience. This is expected and is in-line with the theory presented here. Also in agreement with this theory is the significant negative correlation between the Lenovo statistic and the 05-06 attendance. This suggests that when a valuable player leaves a team, the attendance at home games in the following year decreased for the team that he departed.

TABLE 1
DESCRIPTIVE STATISTICS AND CORRELATIONS

	Mean	s.d.	1	2	3	4	5
1. 05-06 Attendance	17,314	1,172					
2. 06-07 Attendance	17,557	1,078	-.059				
3. Experience	3,359	3,487	-.120	.042			
4. Contract Change	-410,110	17,676,512	.028	-.030	.154		
5. +/- Statistic	-14.84	152.10	-.334**	.062	.402**	-.118	
6. Philosophy Match	0.34	0.48	.204	.167	.006	-.140	-.107

**Correlation is significant at the 0.01 level (2-tailed).

Univariate tests were run to test the significance of the three predictor variables in predicting each of the dependent variables individually. Table 2 shows the univariate results related to the significance of each dependent variable. Based on the univariate results, the only dependent variable that was significantly predicted by the variables in this model was 2005-2006 attendance. In this model, only the Lenovo Statistic contributed significantly at .01 ($t(1) = -2.65$, $p = .0098$).

TABLE 2
UNIVARIATE TESTS OF SIGNIFICANCE

Dependent Variable	F	D F	F	P
05-06 Attendance	72	3/ 91	3.	0.012
06-07 Attendance	72	3/ 85	0.	0.4695
Salary Change	72	3/ 36	2.	0.0783

Multivariate multiple regression analyses were performed to determine the best model considering the three predictor variables of Lenovo Statistic (Len), team experience (Exp), and philosophy match (Phil_Match). First, the overall model with all predictors included was tested. The null hypothesis: H_0: $\underline{B}_{Len} = \underline{B}_{Exp} = \underline{B}_{Phil\_Match} = 0$ was tested and rejected at the .05 level. Table 3 shows the results of the Wilks' Lambda, Roy's Greatest Root, Hotelling-Lawley Trace, and Pillai's Trace tests. These tests indicate that the predictors are significantly better than the baseline model in predicting the 2005-2006 attendance change, 2006-2007 attendance change, and change in contract value.

TABLE 3
TESTS OF SIGNIFICANCE – OVERALL MODEL
MULTIVARIATE STATISTICS AND F APPROXIMATIONS

Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.75535643	2.31	9	170.51	0.0176
Pillai's Trace	0.26342641	2.31	9	216	0.0169
Hotelling-Lawley Trace	0.29936337	2.30	9	106.86	0.0208
Roy's Greatest Root	0.16792081	4.03	3	72	0.0104

NOTE: F Statistic for Roy's Greatest Root is an upper bound.

The above results indicate significance in at least one of the three predictors in predicting the dependent variables; however, the do not give any indication as to which individual predictor variables are contributing significance to the model. Additional tests of significance were conducted on the predictor variables individually to determine if each significantly contributes to the model over and above what the two other variables are contributing. Table 4 shows the results of these tests and shows that the Lenovo Statistic significantly contributes to the model over and above experience and philosophy match at the .05 level and that the philosophy match variable significantly contributes over and above at the .1 level; consequently, hypotheses 2 and 3 are supported. Experience was not found to be a significant predictor; therefore, no support was found for hypothesis 1.

TABLE 4
OVER AND ABOVE TESTS OF INDIVIDUAL PREDICTORS

Predictor Variable	Pr > F
Experience	0.2687
Lenovo Statistic	0.0206**
Philosophy Match	0.0803*

**Significant at .05
*Significant at .1

Additional tests were done to determine the relatively better linear model using the adjusted R^2 criterion. Subsequently, six additional multivariate multiple regression analyses were run to determine the relatively best model at predicting the dependent variables. Models were compared based on adjusted R^2 values. The adjusted R^2 measure was chosen due to the fact that it takes into consideration the number of predictors and sample size of the model. Table 5 shows the p-values for determining significance of each of these models and the adjusted R^2 for the seven models (includes the overall model) that were tested. (See Appendix C for detailed results.)

TABLE 5
MODELS WITH DIFFERENT VARIABLE COMBINATIONS

Predictors Included	Pr > F	Adjusted R^2
All	0.0169*	0.749
Lenovo and Philosophy Match	0.0123*	0.794
Experience and Philosophy Match	0.1182	0.866
Experience and Lenovo	0.0386*	-2.033E+12
Philosophy Match Only	0.0689	0.907
Lenovo Only	0.0215*	0.875
Experience Only	0.3901	0.959

*Significant at .05

Based on these results, I conclude that the best model for predicting the change in attendance across the two seasons and change in contract value is the model that includes only the Lenovo Statistic. Of the significant models, this model had the largest adjusted R2 of all the models.

DISCUSSION

Implications for Theory and Practice

"Not only is professional sports a business; it is an exemplar for business" (Keidal, 1984, p. 5). Many parallels between the sports and business worlds are evident (e.g. teamwork, group cohesiveness, developing young talent, competition, etc.) This paper has built on these connections to further theoretically connect the two areas. In most cases, sports metaphors are applied to business; however, this paper turns the perspective in the other direction by applying business theories (RBV, knowledge management, etc.) to sports. I feel this area is ripe for future research.

From a practical perspective, this paper offers guidance for managers in the business world and players and coaches in the sports world. From the business perspective, managers can apply this theory to recognize and identify the importance of tacit knowledge that is created by grouping certain people in the organization. Additionally, this establishes a clear link between strategy and personnel that managers could use when recruiting new talent from the labor market. Likewise, players could use this data to leverage larger contracts with the teams they currently play for or from other teams with similar strategic philosophies.

Limitations and Future Research

Professional sports provide a laboratory of sorts for examining strategic management phenomena. This is partly due to the large amounts of data (statistics) available and various measures of individual (all-star teams, scoring titles, etc.) and firm performance (titles, win/loss record, etc.) inherent in sports. Where parallels between sports and business can be established, researchers will find a plethora of data sources and statistics for empirical testing.

The findings of this study demonstrate the use and importance of teamwork. The Lenovo Statistic was found to be the strongest predictor of a player's market value. A major limitation of this study is the use of change in contract value for players that were under contract and transferred their contract to a new team. This caused problems with the data in that several players in the sample had 0 change in their contract. Future research should focus on players who had new contracts during the time period, regardless of the team for which they were a member. This would create issues with the change in attendance variables, but would add to the interest level of the study. This research could also be applied to other professional sports (e.g. baseball, football, hockey, etc.) and comparison studies could be

conducted to see if there any differences across sports. I would hypothesize that teamwork variables would be consistent across sports. Future research should also consider other player-specific variables that influence a player's market value. A player's height, for example, is generally understood to a contributing factor in the market value of a basketball player. The taller a player is; the higher the salary they are able to demand.

Conclusion

Using the resource based view's focus on strategic resources as rare and inimitable as my foundation, I examined professional athletes as strategic resources. This analysis examined the relationship between the perceived rarity and imitableness of players as they relate to membership on a certain team. I believe that the imitableness and rarity of resources (players) is firm (team) specific. Logically, this provides a basis for players as sources of competitive advantage. In this situation, transferability would be the degree that players could move from organization to organization and their competitive advantage generating value remains constant. The argument provided in this paper is an initial attempt to determine who actually owns tacit knowledge and whether or not individuals that are members of high performing organizations can leverage group-based tacit knowledge in the labor market.

REFERENCES

Barney, J. (1991). Firm Resources and sustained competitive advantage. *Journal of Management,* 17,(1), 99-120.

Berman, S.L., Down, J., & Hill, C.W. (2002). Tacit knowledge as a source of competitive advantage in the national basketball association. *Academy of Management Journal*, 45,(1), 13-31.

Campbell, B.A., Saxton, B.M., & Banerjee, P.M., (2014). Resetting the shot clock: The effect of comobility on human capital. *Journal of Management*, 40, (2), 531-556.

Carpenter, M.A., Sanders, W.G., & Gregersen, H.B. (2001). Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay. *Academy of Management Journal*, 493-512.

Cohen, W.M., & Levinthal, D.A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 128-152.

Crocker, A., & Eckardt, R. (2014). A multilevel investigation of individual- and unit-level human capital complementarities. *Journal of Management*, 40, (2), 509-530.

Finkelstein, S., & Hambrick, D.C. (1990). Top management team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 484-503.

Gerrard, B. (2005). A resource-utilization model of organizational efficiency in professional sports teams. *Journal of Sport Management*, 19, 143-169.

Grant, R., (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 109-122.

Hambrick, D., & Mason, P. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 193-206.

Lechner, C., & Gudmundsson, S.V. (2012). Superior value creation in sports teams: Resources and managerial experience. *M@na@ment,* 15(3): 284-312.

Mahoney, J. T., & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal*, 13, 363-380.

Miller, D., & Shamsie, J. (1996). The resource-based view of the firm in two environments: The Hollywood film studios 1936 to 1965. *Academy of Management Journal,* 519-543.

Peteraf, M.A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 179-192.

Smart, D., & Wolfe, R. (2000). Examining sustainable competitive advantage in intercollegiate athletics: A resource-based view. *Journal of Sport Management,* 14, 133-153.

Teece, D. J., Pisano, G., & Shuen A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal,* 18, (7), 509-533.
Vrooman, J. (1995). A general theory of professional sports leagues. *Southern Economic Journal.* 61, (4), 971-990.
Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.
Wright, P.M., Coff, R., & Moliterno, T.P. (2014). Strategic human capital: Crossing the great divide. *Journal of Management*, 40, (2), 353-370.
Wright, P.M., Smart, D.L., & McMahan, G.C. (1995). Matches between human resources and strategy among ncaa basketball teams. *Academy of Management Journal,* 38, (4), 1052-1074.