

## **The Influence of Star Performers on Coordination and Performance: Does Type of Star Matter?**

**Christopher M. Harris<sup>1</sup>**

### **Abstract**

---

This study contributes to human capital research by focusing on star performers and a process through which they influence team performance. Star performers are important determinants of team functioning and performance. Using American collegiate basketball teams as a sample, this study examines two distinct measures of star performers and predicts different relationships between star performers, coordination, and performance based on the measure of a star performer. Coordination is examined as a process through which star performers influence unit performance. Evidence of coordination mediating the relationship between star performers and performance is found.

---

Teams may have star performers who are disproportionately productive and valuable (Groysberg & Lee, 2008). While star performers are important to the performance of teams, it is also important for teams to function effectively in order to perform at a high level (e.g., Barrick, Stewart, Neubert, & Mount, 1998). Strategic human resource management frameworks indicate the relationship between human capital and performance works through behaviors that are important to the functioning of a team (e.g., Delery & Shaw, 2001; Wright & McMahan, 1992; Wright et al., 1994; Wright & Snell, 1991). Therefore, it is important to examine processes through which star performers influence the performance of teams.

This study makes contributions to human capital research by assessing star performers in two different manners to examine their differential effects on team behaviors and performance. Additionally, this study examines coordination as process through which star performers influence the performance of teams. Star performers are strategically important, (Groysberg et al. 2008) therefore it is important to consider the influence that star performers have on team processes and performance. Research indicates that stars may have positive or negative influences on teams (e.g., Groysberg, Nanda, & Nohira, 2004). Stars that work well with fellow team members can enhance the functioning of the team (Groysberg & Lee, 2008). Stars may also demonstrate dominance in a team which would hamper team functioning (e.g., Driskell, Goodwin, Salas, & O'Shea, 2006; Groysberg et al., 2004). In this study, star performers are assessed in two distinct manners and their differential influences on team coordination and performance are examined.

This study also extends human capital research by examining coordination as a process through which star performers influence team performance. This relationship is important to examine because people must use their human capital to create behaviors that lead to performance (Wright et al., 1994). Star performers are important to consider as they can influence the overall behaviors and performance of teams. These relationships are tested with a unique sample of NCAA men's basketball teams.

---

<sup>1</sup> School of Management, Texas Woman's University, Denton, TX 76204, USA.

## Star Performers and Competitive Advantage

According to the resource-based view of the firm, resources that are valuable, rare, inimitable, and non-substitutable create a competitive advantage for an organization (Barney, 1991). Following the resource-based view of the firm, differences in human capital, including the star performers of units create performance differences across units (e.g., Groysberg & Lee, 2008; Hitt, Bierman, Shimizu, & Kochar, 2001). Therefore, teams with star performers should outperform units without star performers (Groysberg & Lee, 2008).

While it is important for teams to have star performers, it also important for these stars performers to exhibit the necessary behaviors for the unit to be successful (Delery & Shaw, 2001; Wright et al., 1994; Wright & Snell, 1991). Therefore, teams must select individuals that have the human capital necessary to exhibit the required behaviors (Wright et al., 1994). According to Wright et al. (1994), the potential of human capital is realized only to the extent that the possessors of the human capital choose to allow the unit to benefit from the human capital through their behaviors.

The systems perspective of strategic human resource management proposes that the influence of people on performance acts as an input, throughput, out model (Wright and Snell, 1991). In this type of system it is proposed that characteristics of human resources (i.e., people) are the input and the human resources engage in role behaviors (throughput) that result in performance outcomes (output) (Wright & Snell, 1991). Therefore, it is indicated that people behaviors should mediate the relationship between characteristics of the workforce and performance (McMahan, Virick, & Wright, 1999; Wright & McMahan, 1992). As mentioned previously, this study examines coordination, which is defined as behavior that is intended to integrate and align the actions, knowledge, and objectives of interdependent members to achieve common goals (e.g., Brannick, Price, Prince, & Salas, 1995; Rico, Sanchez-Manzanares, Gil, & Gibson, 2008). Therefore, teams with star performers that enhance the coordination of other members of the team and increase team performance may develop a competitive advantage over other teams.

## Star Performers, Coordination, and Performance

Today, organizations are more and more concerned with attracting and retaining individuals who are disproportionately productive and valuable (e.g., Groysberg & Lee, 2008; Groysberg et al., 2008). These star performers are important to organizations as they can have a large impact on the performance of organizations (Maister, 1993). According to Groysberg and colleagues (2008), two factors distinguish star performers from average performers. First, star performers are disproportionately more productive (Groysberg et al., 2008), making them more valuable to organizations (Groysberg & Lee, 2008). For example, star researchers have been found to be many times more productive than their colleagues (Ernst, Leptein, & Vitt, 2000; Narin & Breitzman, 1995). The ability and experience of star performers are assets that cannot be compensated for by less stellar performers or nonhuman assets (Kelley & Caplan, 1993; Narin, 1993). Second, star performers are more visible than average performers (e.g., Groysberg & Lee, 2008; Groysberg et al., 2008). That is, they receive more attention from competitors, clients, and the media.

Similar to any industry, NCAA men's basketball has star performers. One way to assess a star performer in NCAA men's basketball is through the selection to an All American team. Each year, sportswriters vote on players to be selected to the Associated Press All American Team. Each year, 15 players are selected as All Americans. As it is rare to be selected as an All American, these players represent the most talented players. A basketball team with a highly talented All American player will most likely have an advantage over other teams. However, as playing basketball is a highly interdependent task, it is important for the All American player to work with teammates and coordinate their activities together in order to produce higher team performance.

One item that may distinguish star performers is the people they work with (Groysberg et al., 2004). "Teammates often help stars by counseling them, coaching them, and serving as role models" (Groysberg et al., 2004 p. 6). If star performers are able to integrate and coordinate their activities with team members, the team most likely will perform at a higher level (Groysberg & Lee, 2008). This concept is similar with NCAA men's basketball teams, a star player must work with his teammates in order for the team and most likely himself to perform at a higher level.

As mentioned previously, players with a higher level of human capital in playing basketball will understand the need for players on the team to coordinate their activities in order for the team to perform at a higher level. A team with an All American has a player with a superior level of basketball human capital. Therefore, an All American player may facilitate the coordination of teammates in order for the team to perform at a high level.

As a specific example, John Wall and DeMarcus Cousins from the University of Kentucky were each selected as All Americans for the 2009-2010 NCAA Division One Men's Basketball season. The following quotes from them after being selected as All Americans demonstrate how they worked with their teammates to help the team perform at a high level. John Wall stated, "We had to learn a lot as freshmen and we were able to help our teammates along the way. This means a lot to both of us." Additionally, DeMarcus Cousins said, "This means a lot because all we really did was try to come in and help our teammates" (Associated Press, 2010). These quotes indicate that All American players can work to coordinate the activities of their teammates in order for the team to perform at a high level.

*Hypothesis 1: The positive relationship between a star player assessed as a team having an All American player and team performance is mediated by coordination.*

Another way to assess a star basketball player is via the percentage of a team's points scored by the team's highest scorer. In this situation, the highest scorer on the team may be viewed as the star player on the team. This is much different from an All American player, who is selected from all of the players in NCAA Division One men's basketball. The player who scores the largest percentage of a team's points may only indicate that the player is a star on his team. As basketball is a highly interdependent task, it is important for players to work together and coordinate their activities for the team to perform at a high level. If one player is scoring a large percentage of a team's points it may indicate that the team is not working well together and that one player is dominating the team. In this situation, teams may have poor coordination and therefore, lower performance.

Psychological research has examined the trait of dominance (e.g., Driskell, Goodwin, Salas, & O'Shea, 2006). Dominance can be defined as striving for superiority, control, and influence over others (Watson & Clark, 1997). Dominant persons can also be thought of as headstrong, controlling, and combative (Driskell et al., 2006). Dominant behavior has been shown to have a negative influence on organizations. For example, Hambrick & D'Aveni (1992) found organizations with dominant CEOs were more likely to eventually end up in bankruptcy. Additionally, with interdependent teams, the tendency of dominant individuals to be authoritative and controlling can be damaging to team performance (Driskell & Salas, 1992). Dominant individuals can also have a negative influence on the coordination of individuals on teams that are interdependent (Driskell et al.; 2006). Therefore, a dominant individual can hamper the coordination of team members and ultimately the performance of the team.

Specifically with basketball teams, when a team's highest scorer is scoring a large percentage of the overall points scored by the team, it may indicate that the team has a player demonstrating dominant behavior. While this player may be regarded as a star player on the team because of all the points they score, it may be detrimental to the team (Groysberg, Nanda, & Nohira, 2004). As mentioned previously, dominant individuals can have a negative influence on the coordination of team members performing an interdependent task which then leads to lower team performance. Additionally, if a team has one player who scores a large percentage of the team's points, it may indicate that the other players on the team have low levels of human capital in playing basketball. If the star player is not surrounded by other talented players, the overall team could have coordination and performance difficulties (Groysberg et al., 2004). Therefore, a basketball team that has a player dominating the scoring may have poor coordination. As playing basketball is a highly interdependent task, the coordination of players on a basketball team is important to the overall success of the team (Driskell & Salas, 1992). Therefore, the lower level of coordination brought on by a team having one player who scores a large percentage of a team's points would then lead the team to perform at a lower level.

*Hypothesis 2: The negative relationship between a star player measured as the percentage of a team's points scored by the team's top scorer and team performance is mediated by team coordination.*

## Methods

### Sample

National Collegiate Athletic Association (NCAA) Division One men's basketball provided a useful sample for this study as each team operates under the same rules and regulations and shared metrics of star players, behaviors, and performance are available. NCAA men's basketball has been used as a sample in previous studies (e.g., Clement & McCormick, 1989; Wright et al., 1995). By choosing a sample of teams from the same industry, it allows for many controls to be built into the study. For example, the NCAA sets rules on the number of scholarships each team has, it also sets recruiting regulations, and the NCAA sets limits on the amount of time each team can practice. All data for this study were archival. Complete data for 345 NCAA Division One men's basketball teams that competed in the 2009-2010 season were available.

### Measures

*All American Player:* Each year, the Associated Press selects an All American team of NCAA men's basketball players. For this study, the All American team for the 2009-2010 season was used. Sportswriters vote each year on players they feel should be on the All American team. The top vote getters are selected to be on the All American team. The Associated Press has a first team, a second team, and a third team, and each team consists of five players. Therefore, only 15 players each year are selected as All Americans. The All American players represent the best players in NCAA men's basketball for the current season. As only 15 players are selected each season as All Americans, it is rare for players to be All Americans. Additionally, being selected as an All American indicates that a player is an exceptional player and is considered to be a "star." Dummy coding was used to indicate teams that had a player on an All American team. Teams with an All American player were coded with a 1 and teams without an All American player were coded with a 0.

*Percentage of team's points scored:* The season ending statistics for the 2009-2010 season for each team were collected from ESPN's NCAA men's basketball database. The database provides the average points per game scored by each team and the average points per game scored by each player on the team. The percentage of the team's points scored by the highest scorer on each time was calculated by dividing the average points per game scored by the team's highest scorer by the average points per game scored by the team.

*Team Coordination:* To measure coordination, the assist to turnover ratio for each team for the 2009-2010 season was utilized. The assist to turnover ratio for each team was collected from each team's season ending statistics that are available from the NCAA Division One men's basketball database maintained by ESPN. The assist to turnover ratio was calculated as the number of assists divided by the number of turnovers committed by each team.

The assist to turnover ratio was used as a measure of coordination because, first, when playing basketball coordination is needed when an assist occurs. An assist takes place when one player passes the ball to another player and by virtue of the pass the player was able to make a basket without dribbling the basketball. Second, coordination is needed to reduce turnovers. When players coordinate their actions, players may be more likely to know where teammates are going to be on the court which may reduce the likelihood of throwing an errant pass that results in a turnover. Third, the assist to turnover ratio provides a team level measure of coordination as each player on the team could make or contribute to an assist or turnover. Thus, greater coordination is achieved when teams have higher assist to turnover ratios.

*Performance:* Team winning percentage in the 2009 – 2010 seasons was used to assess team performance. To calculate team winning percentage, the number of wins was divided by the total number of games played. Team wins and losses were obtained from the same database as team assist to turnover ratio. Additionally, to control for past performance we used team winning percentage in the 2008 – 2009 season.

*Head coaches' human capital:* Head coaches' human capital was controlled for with two measures. The number of games a head coach had coached in a head coaching position at the collegiate level through the 2008-2009 season was collected. Second, the winning percentage for each head coach while in a head coaching position at the collegiate level through the 2008-2009 season was collected. The winning percentage for each head coach was calculated by dividing the number of games won by the total number of games coached. The number of games each head coach has coached at the collegiate level and each head coach's winning percentage were collected from each head coach's biography listed on the athletics website of each college or university that has an NCAA Division One men's basketball program.

## Analyses and Results

Table 1 shows the means, standard deviations, and correlations for the variables in this study. We tested our hypotheses by following Preacher and Hayes (2008) procedure for mediation. This method uses bootstrapping; which is a nonparametric resampling procedure recommended for testing mediation because it does not impose the assumption of normality of the sampling distribution. Bootstrapping involves repeatedly sampling the data set and estimating the indirect effect in each resampled data set (Preacher & Hayes, 2008). Repeating this process thousands of times allows for an approximation of the sampling distribution to be built and confidence intervals constructed for the indirect effects (Preacher & Hayes, 2008). The mediation procedure allows for the entire hypothesized model to be tested at once. Therefore, we are able to examine the total direct effect of the independent variables on the dependent variable and the indirect effects of the mediating variable. When interpreting the results of the mediation, point estimates of indirect effects were considered to be significant when the confidence intervals did not contain zero (Preacher & Hayes, 2008).

**Table 1: Means, Standard Deviations, and Correlations**

Variables	Mean	S.D.	1	2	3	4	5	6
1. Team Performance 2008-2009 Season	.51	.17						
2. Number of Games as Head Coach	321.43	253.82	.15**					
3. Winning Percentage as Head Coach	.50	.19	.30**	.53**				
4. All American Player	.03	.18	.18**	.25**	.18**			
5. Percentage of Team's Points Scored	22.70	3.71	.00	-.11*	-.06	.06		
6. Team Coordination	.96	.20	.46**	.23**	.29**	.26**	.03	
7. Team Performance 2009-20010 Season	.50	.18	.56**	.18**	.31**	.29**	-.04	.59**

n = 345, \*p < .05, \*\*p < .01

Head coaches' human capital and team performance in the 2008-2009 season were controlled for in the analysis. As shown in Table 2, neither measure of head coaches' human capital was significantly related to team performance or team coordination. Team performance in the 2008 – 2009 season was significantly related to team performance in the 2009 – 2010 season and team coordination.

The results for hypotheses one and two are displayed in Table 3. Hypothesis one predicted team coordination would mediate the relationship between star players assessed as being an All American and team performance. As two different measures of star performers we assessed, they were entered in the analysis at the same time when predicting team performance and team coordination. A team with an All American player had higher team performance (coefficient = 0.127, p < .01) and greater coordination (coefficient = 0.154, p < .01). The test for mediation shows that the confidence interval for indirect effect of a team with an All American player on performance through coordination did not contain zero. Thus, the results provided support for coordination acting as a mediator between teams with an All American player and performance. Therefore, hypothesis one was supported.

Hypothesis two predicted the negative relationship between a star player, assessed as a percentage of the team's points scored by the team's highest scorer and team performance would be mediated by team coordination. The percentage of a team's points scored by the team's highest scorer was not significantly related to team performance (coefficient =  $-.003$ ,  $p > .05$ ), however the beta weight was in the expected direction. Additionally, the test for mediation did not indicate that coordination mediated the relationship between the percentage of a team's points scored by the team's highest score and team performance, as the confidence interval contained zero.

**TABLE 2: Direct Effects on Performance and Coordination**

	Performance (2009-2010)	Coordination
Performance (2008-2009)	.352**	.434**
Head Coach Career Winning Percentage	.085	.115
Number of Games as a Head Coach	.000	.000
All American Player	.127**	.154**
Percentage of Team's Points Scored	-.003	.002
R <sup>2</sup>	.481**	.266**

n = 345

\*p < .05

\*\*p < .01

**Table 3: Indirect Effects on Performance through Coordination**

Variable	Effect	Lower Confidence Limit	Upper Confidence Limit
All American Player	.054	.017	.103
Percentage of Team's Points Scored	.001	-.001	.002

n = 345

## Discussion

This study contributes to human capital research, first, by examining star players via two different operationalizations and their influences on team functioning and performance. Additionally, this study contributes to human capital research by examining coordination as mechanism through which star performers influence team performance. Star performers and their influence on performance have received increased research attention in recent years (e.g., Groyberg & Lee, 2008; Groyberg et al., 2008). Star performers can have a positive influence on performance when they are able to effectively work with others (Groyberg et al., 2008). On the other hand, a star performer can have a detrimental impact on performance as decreased morale and communication among people may occur with the addition of a star performer (Groyberg et al., 2004). In this study, star basketball players were assessed in two different manners and their influence on team coordination and team performance was tested. Star players were first identified by their selection to the All American team. As mentioned previously, only 15 players each year are selected to the Associated Press All American team. Therefore, these players represent superstar players in NCAA men's basketball. Additionally, star players were assessed via the percentage of team's points scored by the team's highest scorer.

Teams that have an All American player performed at a higher level. This finding indicates that teams with an elite player tend to perform at higher levels than teams without an elite player. Based on this assessment of star players, they can have positive influences on the performance of NCAA men's basketball teams. Considering the percentage of a team's points scored by the team's highest score, it was predicted that a larger percentage of points scored by one player would be related to lower team performance. This measure of a star player was not significantly related to team performance; however the beta weight did indicate a negative relationship. As mentioned previously, basketball is an interdependent task. Therefore, if one player is dominating the scoring it may mean that the team is not working interdependently and this may result in lower team performance. Additionally, star players' influence on team coordination and the mediating role of team coordination between the star player and team performance relationship were examined. Teams with an All American player had higher levels of team coordination.

Additionally, team coordination mediated the relationship between star players and team performance. The quotes earlier from All Americans, John Wall and Demarcus Cousins indicate their willingness to help teammates in order for the team to perform at a higher level. Highly talented players may help to make other players on the team better. By working with teammates and coordinating their activities, star players can have a positive influence on team performance. Our results indicate that at least partially through coordination behaviors, star players have a positive influence on overall team performance. On the other hand, the percentage of points scored was not significantly related to team coordination. It was theorized that a player who dominates a team's scoring may have a negative influence on the coordination of teammates (Driskell et al., 2006). With a highly interdependent task, such as basketball, a team member who is dominant over others is not desirable and may have a negative impact on the team. Specifically with NCAA basketball this may be the difference between an All American player and simply being a star player on a team. All Americans improve the performance of others while star players who exhibit dominance on their team take a more individualistic approach that could be detrimental to the overall team.

An elite performer can have a positive influence on the performance of their team. They can positively influence the performance of their team not only by means of their superior performance, but also by working with teammates and coordinating activities with them. Therefore, in a team environment it is important for stars to be able to work with their teammates in order for the team to perform at a high level. If the star demonstrates dominant behavior within the team, the team most likely will perform at a lower level. This may be because team members may feel unimportant and have decreased morale (Groysberg et al., 2004). Additionally, a star that demonstrates dominant behavior may not coordinate activities with teammates and work with them which may lead to lower team performance. Therefore, when recruiting a star performer, organizations that have team environments will need to consider whether a star performer can effectively work with teammates. If the star performer cannot effectively work with others then the organization may be better off without the star performer.

### **Limitations, Future Research, and Conclusion**

There may be limitations with the measures of star players. The Associated Press All American team is based on votes by sportswriters; therefore it may be somewhat subjective in nature. Additionally, players that are on teams that receive more media coverage and have more games televised are more visible. This increased visibility may influence the voting of All Americans. However, as mentioned previously only 15 players each year are selected as All Americans. Therefore, the All American team represents superstar players. Our second measure of a star player based on the percentage of points score by the team's top scorer also has limitations. Simply because a player scores a large percentage of team's points, does not necessarily mean the player is a star performer. They may simply be a good player on a bad team. Additionally, this measure may represent a star player on a team, but it may not represent a true star player on the national level, like the All American team does. The measure of team coordination also has its limitations. The measure of team coordination is a proxy measure derived from teams' assist to turnover ratio. While this measure is a proxy, the assist to turnover ratio is an industry accepted measure. The assist to turnover ratio also provides a team level measure of coordination as each player on a team can make or contribute to an assist or turnover. In conclusion, this study contributed to human capital research by operationalizing star players in two distinct ways and examining their impacts on team coordination and performance. Star performers who are able to work with others May help the organization perform at a higher level, while stars that exhibit dominance may have detrimental effects on performance. Overall, it is important for organizations to consider the influence of star performers as organizations seek to improve performance.

### **References**

- Associated Press (2010). UK freshmen highlight All-Americans.  
<http://sports.espn.go.com/ncb/news/story?id=5037799>. Accessed November 20, 2010.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1): 99-120.
- Baron, R.M. & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51: 1173-1182.

- Barrick, M.R., Stewart, G.L., Neubert, M.J., & Mount, M.K. (1998). Relating member ability and personality to work-team processes and team effectiveness. *Journal of Applied Psychology*, 83: 377-391.
- Becker, G.S. (1964). *Human Capital*. New York: Columbia University Press.
- Brannick, M.T., Roach, R.M., & Salas, E. (1993). Understanding team performance: A multimethod study. *Human Performance*, 6: 287-308.
- Cohen, S.G. & Bailey, D.E. (1997). What makes team work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management*, 23(3): 239-290.
- Delery, J. E., and Shaw, J. (2001). The Strategic Management of People in Work Organizations: Review, Synthesis, and Extension. In G. Ferris and J. Martocchio (eds) *Research in Personnel and Human Resource Management*, Vol. 20, pp 165-197.
- Driskell, J.E., Goodwin, G.F., Salas, E., & O'Shea, P.G. (2006). What makes a good team player? Personality and team effectiveness. *Group Dynamics, Theory, Research, and Practice*, 10(4) 249-271.
- Driskell, J.E. & Salas, E. (1992). Collective behavior and team performance. *Human Factors*, 34(3): 277-288.
- Ernst, H., Leptin, C., & Vitt, J. (2000). Inventors are not alike: The distribution of patenting output among industrial personnel. *IEEE Transactions on Engineering Management*, 47: 184-199.
- Groysberg, B. & Lee, L. (2008). The effect of colleague quality on top performance: The case of security analysts. *Journal of Organizational Behavior*, 29: 1123-1144.
- Groysberg, B., Lee, L., & Nanda, A. (2008). Can they take it with them? The portability of star knowledge workers' performance. *Management Science*, 54(7): 1213-1230.
- Groysberg, B., Nanda, A., & Nohira, N. (2004). The risky business of hiring stars. *Harvard Business Review*, May 2004: 1-9.
- Hambrick, D.C. & D'Aveni, R.A. (1992). Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science*, 38(10): 1445-1466.
- Hitt, M.A., Bierman, L., Shimizu, K. & Kochhar, R. (2001). Direct and indirect effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal*, 44 (1): 13-28.
- Kelley, R. & Caplan, J. (1993). How Bell Labs create star performers. *Harvard Business Review*, 71: 128-139.
- Leedom, D.K. & Simon, R. (1995). Improving team coordination: A case for behavior-based training. *Military Psychology*, 7: 102-122.
- Maister, D.H. (1993). *Managing the professional service firm*. New York: Free Press.
- Marks, M.A., Mathieu, J.E., & Zaccaro, S.J. (2001). A temporally based framework and taxonomy of team processes. *Academy of Management Review*, 26: 356-376.
- McMahan, G.C., Virick, M., & Wright, P.M. (1999). Alternative Theoretical Perspectives for Strategic Human Resource Management Revisited: Progress, Problems, and Prospects. In Wright, P., Dyer, L., Boudreau, J., & Milkovich, G. (Eds.). *Research in Personnel and Human Resource Management, Supplement*, 4, 99-122. Greenwich, CT: JAI Press.
- Narin, F. (1993). Technology indicators and corporate strategy. *Review of Business*, 14: 19-23.
- Narin, F. & Breitzman, A. (1995). Inventive productivity. *Research Policy*, 16: 143-155.
- Pfeffer, J. (1994). *Competitive advantage through people*. Boston: Harvard Business School Press.
- Pil, F.K. & Leana, C. (2009). Applying organizational research to public school reform: The effects of teacher human and social capital on student performance. *Academy of Management Journal*, 52(6): 1101-1124.
- Ployhart, R.E., Weekley, J.A., & Ramsey, J. (2009). The consequences of human resource stocks and flows: A longitudinal examination of unit service orientation and unit effectiveness. *Academy of Management Journal*, 52: 996-1015.
- Preacher, K.J. & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36: 717-731.
- Rico, R., Sanchez-Manzanares, M., Gil, Francisco, & Gibson, C. (2008). Team implicit coordination processes: A team knowledge-based approach. *Academy of Management Review*, 33(1): 163-184.
- Watson, D., & Clark, L.A. (1997). Extraversion and its positive emotional core. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of Personality Psychology*. 767-793. San Diego, CA: Academic Press
- Wright, P.M. & McMahan, G.C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*. 18(2): 295-320.
- Wright, P.M., McMahan, G.C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: A resource-based perspective. *International Journal of Human Resource Management*, 5: 301-326.
- 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.
- Wright, P.M. & Snell, S.A. (1991). Toward an integrative view of strategic human resource management. *Human Resource Management Review*, 1: 203-225.