Does Transition Experience Improve Newcomer Performance? Evidence From the National Basketball Association

Joseph R. Radzevick
Gettysburg College

Follow this and additional works at: https://cupola.gettysburg.edu/mgmtfac

Part of the Social Psychology Commons, Sports Management Commons, and the Sports Studies Commons

Share feedback about the accessibility of this item.


This is the author's version of the work. This publication appears in Gettysburg College's institutional repository by permission of the copyright owner for personal use, not for redistribution. Cupola permanent link: https://cupola.gettysburg.edu/mgmtfac/24

This open access article is brought to you by The Cupola: Scholarship at Gettysburg College. It has been accepted for inclusion by an authorized administrator of The Cupola. For more information, please contact cupola@gettysburg.edu.
Does Transition Experience Improve Newcomer Performance? Evidence From the National Basketball Association

Abstract
A substantial body of research has highlighted the effects of experience on individual performance in groups. However, the challenges individuals confront after moving between groups require the adoption of more finely grained categorizations of experience to understand how they will help or hinder performance in novel group environments. This article develops a distinct form of experience here termed transition experience to deal specifically with insights individuals accumulate as they shift membership between different groups and contrasts its impact with that of the frequently examined component of related task experience. Player movement data from the National Basketball Association is used to show that related task experience can produce negative consequences, consistent with prior research. Conversely, low to moderate levels of transition experience can aid performance. This holds true for both individual performance and performance more closely related to coordinated actions with teammates.

Keywords
performance, sports teams, newcomers

Disciplines
Social Psychology | Sports Management | Sports Studies

This article is available at The Cupola: Scholarship at Gettysburg College: https://cupola.gettysburg.edu/mgmtfac/24
Does Transition Experience Improve Newcomer Performance?

Evidence from the National Basketball Association

Joseph R. Radzevick

Department of Management, Gettysburg College, 300 North Washington St., Gettysburg, PA 17325, Email: jrradzevick@gmail.com

Acknowledgements

Thanks to Peter Conroy and Erick Lapice for valuable research assistance.
Does Transition Experience Improve Newcomer Performance?

Evidence from the National Basketball Association

Abstract

A substantial body of research has highlighted the effects of experience on individual performance in groups. However, the challenges individuals confront after moving between groups requires the adoption of more finely grained categorizations of experience to understand how they will help or hinder performance in novel group environments. This article develops a distinct form of experience here termed transition experience to deal specifically with insights individuals accumulate as they shift membership between different groups and contrasts its impact with that of the frequently examined component of related task experience. Player movement data from the National Basketball Association is used to show that related task experience can produce negative consequences, consistent with prior research. Conversely, low to moderate levels of transition experience can aid performance. This holds true for both individual performance and performance more closely related to coordinated actions with teammates.
Does Transition Experience Improve Newcomer Performance?

Evidence from the National Basketball Association

“These are NBA players. You expect them to know how to play. You don’t expect them to know how to play with each other.”

- Rex Chapman, analyst and former player commenting on the Sacramento Kings during the 2005 National Basketball Association playoffs

Membership changes in groups and organizations are inevitable. These changes can result from conscious strategic choices to improve or change existing capabilities (Argote & Ingram, 2000; Boeker, 1997) or from the necessity to replace departed reservoirs of essential knowledge and skills (Argote, 1999). For some, this instability is a relatively rare occurrence (e.g., Devine, Clayton, Philips, Dunford, & Melner, 1999; Salas, DiazGranados, Klein, Burke, & Stagl, 2008), while for others it represents an essential, defining characteristic (e.g., Ancona, Bresman, & Kaeufer, 2002; Klein, Ziegert, Knight, & Xiao, 2006). Collective units on either end of the spectrum must face the consequences associated with the process.

Turnover often proves a disruptive force and an impediment to performance (Argote, 1999; Trow, 1960), but this need not be the case. New members may provide an influx of novel and/or beneficial knowledge and skills to the groups that they join (Ziller & Behringer, 1960). Researchers furthermore have documented the use of personnel movement as a conduit for knowledge transfer across numerous group contexts (Almeida & Kogut, 1999; Argote, 1999; Kane, Argote, & Levine, 2005), though these advantages
are not a given (Gruenfeld, Martorana, & Fan, 2000). Newcomer effectiveness thus depends not only on the quality of knowledge and skills but upon the translation of those competencies to the new group environment. As Argote & Ingram (2000) note, “to be effective at the new unit, (knowledge reservoirs) may have to adapt or be adapted to the new context” (p. 156). Prior research has suggested that such useful adaptations and restructurings are possible (Allen, 1977), which holds true for both explicit and more tacit types of knowledge (Berry & Broadbent, 1984; 1987).

Ideally this process will occur expeditiously, as groups do not have the luxury of waiting for new members to learn how to incorporate themselves into the fold. Early group performance creates an indicator for the degree of success a group will experience throughout the duration of its collective activity (Moreland & Levine, 1989). Research on newcomers has addressed a number of different factors contributing to successful assimilation, including their personal characteristics (e.g., Harrison, Sluss, & Ashforth, 2011) and interactions with various oldtimers (Kammeyer-Mueller, Wanberg, Rubenstein, & Song, 2013; Li, Harris, Boswell, & Xie, 2011; Nifadkar, Tsui, & Ashforth, 2012). However, successful assimilation also depends on the prior experiences that newcomers can draw upon as they adjust to new groups and whether newcomers can transfer these indirect experiences (i.e., ones gained previously in another group or organization) from one place to another (Argote & Kane, 2003). This issue already has been addressed as it pertains to previous experience operating within the same general task environment (e.g., Dokko, Wilk, & Rothbard, 2009), but prior research also has suggested that the complexities of dynamic group environments may necessitate the need to account for other components of experience involved in the process (Reagans, Argote,
& Brooks, 2005). A factor in need of further exploration is one accounting for newcomers’ prior histories of experiences navigating the newcomer process itself, which in turn may better prepare them for subsequent group membership changes they experience.

When entering a group, newcomers face processes of assimilation combining socialization, in which newcomers must become acclimated to their new groups while struggling with their desire to retain individuality (Moreland, 1985; Ziller, 1964), and knowledge translation, in which newcomers must differentiate what the correct responses are in different organizations and groups possessing their own particular collections of routines (Levitt & March, 1988; Mazur & Hastie, 1978). Assimilation can prove challenging for newcomers due to the expectations they developed in previous groups, as a positive relationship exists between newcomer performance and met expectations (Wanous, Poland, Premack, & Davis, 1992). Newcomers, assuming one role while simultaneously leaving another, often find themselves instead needing to make peace with the unrealistic and unmet expectations they brought in with them (Louis, 1980). It stands to reason that individuals who have already performed these kinds of adjustments may handle the process more effectively in future iterations of membership change and therefore incorporate their existing knowledge and skills into the new group environment. Just as individuals gain knowledge and skill about a given activity as they gain experience, they likewise become more accustomed to adapting to new teams effectively and coordinating their own actions with a variety of teammates as they migrate between different work groups and organizations.
This study seeks to establish this additional type of experience as *transition experience* and thus highlight a relatively unexplored component of experience gained in dynamic group environments. The central claim of the paper is that transition experience is a distinct, overlooked yet vital resource which can enhance newcomer performance and therefore should be taken into account as part of the newcomer transition process. The contributions of transition experience to newcomer adaptation and performance are contrasted from those of task experience, a well-established representation of individual experience encompassing how individuals learn about the demands associated with a given activity and the different roles they must fill in the group to achieve success. Whereas task experience involves learning about these task demands and role expectations, transition experience more specifically represents the skills newcomers develop to shift their task-related competencies into new group environments as well as the ability to recognize which specific competencies are optimal candidates for relocation. The relationships between these types of experience and performance are explored by utilizing a sample of over a decade of player movement in the National Basketball Association (NBA).

The following sections discuss the two focal types of experience and how their effects on performance might differ from one another.

**Related Task Experience**

Prior experience may improve performance because it can increase an individual’s knowledge and skills (Schmidt, Hunter, & Outerbridge, 1986). However, people often describe the behavior of new group members as anxious, passive, deferential, and dependent (Moreland & Levine, 1989). Research therefore has suggested
that the benefits of experience that accrue for newcomers will be preceded by detrimental
effects caused by that prior experience, necessitating the prediction of a curvilinear
relationship between task experience and performance.

Dokko, Wilk, and Rothbard (2009) observed that “prior work experience may include not only relevant knowledge and skill, but also routines and habits that do not fit in the new organizational context” (p. 52). Because individual team members gain such related task experience within very specific group and/or organizational environments, it often leads to unhelpful (Huckman & Pisano, 2006) or even negative (Groysberg, Lee, & Nanda, 2008) consequences in their new environments. Specifically, individuals associate activities performed in groups with a specific set of persistent routines and behaviors (Gersick, 1988). When changes occur to the task context, group members continue to apply these erroneous responses because they fail to realize the responses have become inappropriate (Gersick & Hackman, 1990). This kind of inertia can hinder newcomers’ ability to perform because their lack of history in the new setting will cause them to use the interpretation schemes that they developed in their old settings (Louis, 1980). The differences between settings, imperceptible to the newcomer at the time, easily can lead to errors. Thus individuals’ related task experience built in previous groups perversely can detract from performance in the new group environment.

Reagans, Argote, and Brooks (2005) illustrated this pattern in an investigation of surgical teams. The individual task experience of team members was associated with an initial downturn in performance early on in the team’s lifespan. The authors attributed this to the fact that the training process involved individuals gaining surgical experience as they worked in teams of fluctuating membership. Individuals thus increased their
understanding of how to perform surgeries in a general, technical sense while also learning how to perform those surgeries with specific members of particular surgical teams. Negative transfer (e.g., Gick & Holyoak, 1987) occurred as they inappropriately applied knowledge that worked successfully with one set of teammates to their activities performed within a different team. These mistakes are costly because individuals recognize them as mistakes only after they have proved detrimental to performance. This is consistent with the costs associated with feedback seeking (Ashford & Cummings, 1983) and those resulting from Louis’ (1980) stages of surprise and sense making in the assimilation process. Dokko, Wilk, and Rothbard (2009) also directly chronicled the adverse effects of related task experience in the context of insurance call center workers. Prior related experience becomes detrimental because it creates cognitive and behavioral frameworks specific to the routines and habits developed in the prior work environment. Rigid adherence to these prior response patterns ultimately impairs performance as individuals intuitively follow once useful but now outmoded behavioral scripts developed during previous experiences performing the task at hand.

High levels of related task experience may be able to lessen these difficulties. Continued experience with a certain task has been shown to increase performance, even though individuals often cannot articulate their acquired skills directly (Berry & Broadbent, 1984; 1987). This experience also is a primary driver of individuals’ expertise within those given domains (Dane, 2010). Such expertise enables the development of richer, more complex knowledge structures within the domain (Dane & Pratt, 2007). While there is a danger of experts becoming cognitively entrenched in prior response patterns as they adapt to new circumstances (similar to what occurs for newcomers at
lower levels of related task experience), the dynamic nature of many group environments should allow these experienced, more expert newcomers to maintain schemas amenable to change (Dane, 2010). As a result, they can leverage their accumulated domain knowledge to perform intuitive responses more effectively (Dane, Rockmann, & Pratt, 2012; Salas, Rosen, & DiazGranados, 2009). In these types of dynamic group environments, it also is more likely for oldtimers to have some familiarity with incoming group members as former teammates in other groups, competitors in the same task environment, etc. Such familiarity may ease newcomers’ integration into their new groups (Levine & Moreland, 1999).

Given the observed negative effects of related task experience on performance and the potential for attenuation of these effects at high levels of experience, the following hypothesis is offered:

\textit{Hypothesis 1: Related task experience will have a curvilinear (U-shaped) relationship with newcomer performance.}

**Transition Experience**

Even though individuals’ tenure in other groups will result in them accumulating related experience that proves detrimental to their future performance, it may be the case that they also will have the opportunity to gain other, more beneficial types of experience. Specifically, another construct, \textit{transition experience}, is needed to capture individuals’ buildup of skills directly associated with overcoming the cognitive and social hurdles involved with moving from one group or team to another. Just as individuals can learn novel tasks, they also possess the ability to hone the ways in which they adapt to performing in new group environments by leveraging their attempts to do so in the past.
Thus transition experience can be characterized as individuals’ prior experiences as newcomers adapting to new groups and teams. Prior research has alluded to this phenomenon without giving it a more concrete identification. Moreland and Levine (1989) discussed how new group members often benefit from their previous experiences as newcomers as they migrate between groups over time. Similarly, numerous scholars have found evidence that changing memberships can create a class of cosmopolitan newcomers that are more attuned to the processes by which one reference group is replaced by another (Eisenstadt, 1952; Hartley, 1958; Ziller, 1965).

Reagans, Argote, and Brooks (2005) also indirectly described the influence of transition experience in their study of surgical team training. The authors differentiated experience to a certain extent by separating individual experience (measured as the number of times an individual previously had completed the surgical procedure as part of any team) from team experience (measured as the number of surgical procedures the individual had completed with current team members prior to the current procedure), but their otherwise exemplary study inadvertently combines all individual experience within the single category of task experience. As previously noted, during training the teams in their sample exhibited performance impairing negative transfer, consistent with the documented negative effects of related task experience. However, eventually individual experience had a positive effect on team performance. This could have stemmed from relevant knowledge gained by the surgeons as they performed additional surgeries (e.g., Dokko et al., 2009). The authors instead suggested that as individuals repeated procedures within rotating novel team configurations, they became more adept at discerning which techniques and skills were effective in a global sense and which ones
only worked in conjunction with a specific set of surgical teammates. Instead of representing the absence of the negative transfer associated with related task experience, the positive strides made by these surgical teams in the study can be attributed more actively to a process consistent with the now formally designated concept of transition experience.

Newcomer adaptation requires information seeking to gain sense making in the new environment (Miller & Jablin, 1991), but sense making often comes with significant costs (Ashford & Cummings, 1983). Transition experience can circumvent such costs by providing a pre-established, internal source for the necessary sense making. Prior transition experience should help to minimize translation errors while still reducing the need for additional feedback and sense making upon joining a new team. This occurs because individuals can apply the lessons, both positive and negative, that they learned from assimilation episodes they encountered previously. Such an account is analogous to Beyer and Hannah’s (2002) treatment of diverse experiences. Whereas newcomers with narrow experience carried inappropriate expectations and overly strong preferences that interfered with their assimilation, those possessing more diverse experience “had already learned to adjust to various types of jobs in the past” and “in the process they would have developed various tactics to help them adjust” (p. 644). Just as experience adjusting to various job and task demands proved beneficial, so too should the experiences of adapting to other novel group environments.

Unfortunately, it is unlikely these performance gains can continue indefinitely as transition experience increases. Individuals with some amount of transition experience will possess greater insight into how to translate their skills to their new teams, but this
occurs with a significant tradeoff at higher levels. If individuals spend too much time migrating from one new team to another, they likely will be unable to identify and develop the distinct social roles needed to facilitate their transition between groups. This role clarity has been associated with higher levels of both efficacy and role performance effectiveness (Bray & Brawley, 2002). Meanwhile, greater role ambiguity has an adverse effect on efficacy and cohesion (Eys & Carron, 2001).

Such individuals also will fail to discover the benefits found when training and working together in a stable team (e.g., Liang, Moreland, & Argote, 1995; Moreland, Argote, & Krishnan, 1998; Pisano, Bohmer, & Edmonson, 2001). This means that high transition experience may help translate individuals’ insights gained from prior adaptations to new groups but may retard their ability to craft deeper, more intricate bodies of skills upon which to draw. Eventually, the resultant lack of this skill development gained by spending time working with a consistent set of teammates (Dane, Rockmann, & Pratt, 2012; Katz, 1982; Weick & Roberts, 1993) may supersede the positive effects provided by transition experience.

Combining these observations with the previous evidence in favor of transition experience at low to moderate levels suggests the following:

_Hypothesis 2: Transition experience will have a curvilinear (inverted U-shaped) relationship with performance._

**Method**

**Research Context**

Player movement in the NBA was chosen as a useful research context for the current study investigating related task experience and transition experience in a
dynamic, interdependent group environment. In general, studies have found athletic ability to affect both individual and more team based performance (Jones, 1974). Among sports, basketball possesses strong team interdependence, exemplified by high demands for communication, coordination, real-time decisions, and conformity (Pescosolido & Saavedra, 2012). Due to these attributes, this context provides an ideal setting for examining transition experience in particular as players must anticipate their teammates’ actions and adapt their own behaviors within these new settings.

Moreover, the NBA is a clear example of the kind of organizational environment with short horizons and time pressures where efficient membership transition is essential. NBA rosters undergo a large amount of turnover between and within seasons due to free agency and trades, with this player fluctuation often playing a significant role in a given team’s fortunes (Morgan-Lopez, Cluff, & Fals-Stewart, 2009). To be successful, teams need to bring in talented players who provide a good fit with current players and the organization as a whole. From the very start of a season, general managers are accountable for the performance of players that they bring in to the organization. Coaches likewise are held responsible for getting those players to function as a cohesive unit. The players themselves often are expected to make significant and immediate contributions to the overall success of their team. Although team success plays a part in how players are perceived, the sports world ultimately judges NBA players according to certain individual standards (Wang, 2009). Salaries, playing time, accolades (e.g., all-star designations, post-season awards), and roster spots all depend on players’ own performance.
Fortunately, findings from the NBA can generalize to other research contexts, as shown by previous research that has explored the parallels between professional sports and other organizational contexts (Keidel, 1984; 1987). Several studies have utilized the NBA specifically to examine a variety of organizational and group related topics relevant to the current study, including experience (Pfeffer & Davis-Blake, 1986), membership turnover (Morgan-Lopez, Cluff, & Fals-Stewart, 2009), and knowledge translation (e.g., Berman, Down, & Hill, 2002). Therefore, it is reasonable to assume that the current study can provide more general insights for the effect of different experience types on individual performance embedded within larger group and organizational structures.

**Data**

To test the hypotheses, data were collected from a sample of NBA roster movement that had occurred prior to a given season during the seventeen year span between the 1989-1990 and 2005-2006 seasons (inclusive). To remain in the sample, players had to have played solely for that new team throughout the entire season. Player movement associated with the first season of operation for expansion teams (e.g., the Minnesota Timberwolves in the 1989-1990 season) was excluded because these observations do not include values for certain team level control variables (described below). The final adjusted sample consisted of 1,683 total observations. The dependent, independent, and control variables used in subsequent analyses were coded from NBA statistical databases found at www.basketball-reference.com and www.databaseBasketball.com.

**Dependent Variables**
Hypotheses were tested using two different measures of performance in the NBA, both representing the kind of concrete and specific performance measures that are more strongly related to prior experience (Quinones, Ford, & Teachout, 1995).

The first measure utilizes the player efficiency rating (PER) developed by Hollinger (2005). According to its creator, PER computes “a value for each of a player's accomplishments. That includes positive accomplishments, such as field goals, free throws, 3-pointers, assists, rebounds, blocks and steals, and negative ones, such as missed shots, turnovers and personal fouls” (Hollinger, 2007, para. 2). PER also incorporates adjustments to a per minute basis (accounting for differences in playing time) and for the pace of team play (because faster playing teams will have more offensive and defensive possessions). Further adjustments standardize the measure so that the league average for every season is 15.00. By using such a measure, players’ performance as individuals can be accounted for while gaining a sense of how that performance compares to other players across the league and across seasons. Furthermore, such a comprehensive measure of performance attempts to gauge the totality of players’ contributions on the court instead of relying on the kinds of imperfect yet highly salient information that typically is used to assess players (Wang, 2009). The efficiency variable for a given player was the PER value listed for him in the statistical database at www.basketball-reference.com.

While the PER variable serves as a measure of players’ discrete individual performance, the nature of basketball as a task suggests it would be worthwhile to explore an alternative performance measure as well. Specifically, Beauchamp and Bray (2001) identified basketball as a highly interdependent activity in which “role-related
functions are likely to be prevalent, identifiable, and highly integrated with those of other team members” (p. 137). Even though players must ultimately be assessed individually, we also should account for performance tied more directly to coordinated actions with teammates. The second performance measure attempts to accomplish this by computing the ratio of a player’s number of assists to his number of turnovers. A player earns an assist when he completes a pass to a teammate that leads directly to a made field goal. Assists thus provide insights into how players coordinate their actions with one another on the court (Berman, Down, & Hill, 2002). The turnover component captures the “negative coordination” between players. Turnovers occur when a team loses possession of the ball without attempting a shot. Common sources of turnovers include players losing the ball out of bounds, getting the ball stolen by an opposing player, or committing infractions such as offensive fouls or traveling. Turnovers, though counted against individual players, often are the end product of ineffective coordination between teammates. A high assist-to-turnover ratio is intuitively an indicator of more team oriented performance, demonstrating effective play coordinated with teammates and possibly capturing certain tacit knowledge and skills more accurately than the efficiency rating, of which assists and turnovers are only small components. This coordination variable was computed by taking a player’s number of assists for the season and dividing it by the player’s number of turnovers.

**Independent Variables**

*Related task experience* was calculated as the number of years a player had been in the NBA prior to the season in question, capturing the knowledge and skills players accumulate as they function as members of the focal professional basketball league. In
this way, it represents a commonly used time based experience measure (see Quinones et al., 1995).

*Transition experience* was defined as the number of times prior to the team change of the current season that a player had moved from one team to another through free agency or trades. This is equivalent to the total number of teams of which a player became a member minus two (i.e., removing the initial team and the current team). For example, when the New York Knicks traded Dikembe Mutombo to the Houston Rockets before the 2004-2005 season, he had previously played for Denver, Atlanta, Philadelphia, New Jersey, and New York. Therefore, his transition experience upon joining the Rockets was equal to four.

To account for the predicted curvilinear effects, *related task experience*^2^ and *transition experience*^2^ were created by squaring the corresponding variables.

**Control Variables**

Several control variables associated with individual players or their new teams were identified that also may have impacted performance in the new team environment. The *guard* dummy variable differentiates between backcourt and frontcourt players. This distinction may be especially important when exploring the coordination dependent measure as guards typically handle the ball more than forwards and centers, increasing their opportunities to complete assists or commit turnovers. A *free agent* dummy variable differentiates instances in which players joined a team of their own volition from those in which the teams facilitated the player movement. To account for variability in the playing time someone received in the focal season, the variable *minutes per game* was calculated by taking a player’s total minutes played during the season and dividing it by the number
of games played. *Previous minutes per game* addressed the same quantity for the most recent prior season. A player’s previous level of performance from his most recent season was controlled by including *previous efficiency* and *previous coordination* in the relevant models, computed from the prior season’s values for *efficiency* and *coordination* respectively. *Previous win shares* controlled for players’ individual impact on their previous teams’ win totals in the most recent prior season. This measure from www.basketball-reference.com (2007) utilizes a formula based on players’ marginal offensive and defensive contributions to the team so that each win share is equal to one-third of a team victory (i.e., three total available win shares for each game won). This variable was included as a control for a player’s contributions to his previous team’s success, which may contribute to the team’s willingness to part with the player between seasons while additionally reflecting the kind of knowledge and skill related to player performance (e.g., Dokko et al., 2009).

It also may be the case that players’ ability to transition effectively depends on the prior success of the team they are joining, as lower performing groups may be more receptive to newcomers (Choi & Levine, 2004; Moreland & Levine, 1989;). At the same time, players may benefit from quality teammates as the group is comprised currently. Therefore, the winning percentage (i.e., games won divided by total games played) of the team in both its current and most recent previous season was controlled for using the variables *team win percentage* and *team previous win percentage*. Player adjustment also may depend on the temporal stability of the new team, reflecting the degree to which the new team has worked together in the past and their expectations for doing so in the future (Hollenbeck, Beersma, & Schouten, 2012). These kinds of open groups already more
accustomed to dealing with incoming and outgoing players may assimilate newcomers more effectively (Moreland & Levine, 1989; Ziller, 1965). Therefore, the number of previous newcomers to the team in the most recent prior season also was calculated. Note that it would have been possible to examine longer time horizons for both the team winning percentage and previous newcomers. However, this comes with the tradeoff of omitting more observations associated with expansion teams due to the fact that they do not have the requisite prior seasons of history from which to draw. Nevertheless, parallel analyses substituting either three or five year averages for these particular controls were conducted. These alternative models did not feature any substantive changes to the results for the main independent variables of interest in the study.

Dummy variables were included for 1991-2006 to pick up year to year league wide differences (most notable in such instances as the owner instituted lockout that shortened the 1998-1999 NBA season) and also added team dummy variables Team2-Team29 for each team except the Atlanta Hawks to capture any remaining franchise level variations that impact player performance.

**Results**

Table 1 reports descriptive statistics and correlations. Of note, there is a positive correlation between efficiency and coordination ($r = .17, p < .001$). This is not surprising given that the calculation of efficiency incorporates assists and turnovers. However, the fact that this correlation is not excessively high makes it reasonable to treat the two as relatively distinct performance outcomes. The mean for efficiency is significantly below the league average of 15 ($t = -24.78, p < .001$). This may reflect the fact that teams go to
greater lengths to retain players achieving higher individual performance. At the same time, extremely poor performance forces players out of the league entirely because potential employers will pass them by. So although the current sample (with slightly below average efficiency) may not be representative of the league as a whole, it should reflect the actual population of players likely to change teams across the league each season.

The hypotheses were tested using regression analyses. Table 2 reports models using efficiency as the dependent variable of interest. Table 3 reports corresponding models using coordination as the dependent measure. In each case, control variables were introduced in Model 1 (year and team controls do not appear in the tables but were included in all analyses). Related task experience, transition experience, and the two squared terms for those variables were added in Models 2 and 3 respectively. The discussions that follow concentrate on the final results in each Model 3.

**Individual Performance**

More individually oriented performance was examined using efficiency as the dependent measure. Two control variables significantly impacted player efficiency. Previous efficiency had a positive effect \((B = 0.11, p < 0.05)\), sensibly indicating that players’ performance in their most recent season predicts performance the following season. Minutes per game also had a significant positive effect on performance \((B = 0.28, p < 0.001)\). This could stem from the fact that more playing time allows players to adjust to the flow of games better than those who are given less playing time. However, this alternatively could reflect that coaches reward players performing at a higher level with more minutes of game action than players performing at lower levels.
Consistent with Hypothesis 1, the combined effects of related task experience \((B = -0.46, p < 0.001)\) and related task experience\(^2\) \((B = 0.02, p < 0.001)\) produced a curvilinear U-shaped relationship with performance (Aiken & West, 1991). Initially, added years of experience decreased efficiency, but eventually additional experience had a positive effect on efficiency. Interestingly, the period with increasingly negative effects of experience continues for approximately ten seasons (more precisely at a related task experience value of 9.93 with a corresponding 2.62 marginal efficiency value) before starting to rise. This pattern may suggest that the direct benefits associated with this type of experience accrue at a relatively slow rate as players acquire enough knowledge and skills to allow them to offset any adverse performance effects through increased guile and cunning on the court.

Conversely, the combined effects of transition experience \((B = 0.42, p < 0.05)\) and transition experience\(^2\) \((B = -0.05, p < 0.05)\) had a curvilinear inverted U-shaped relationship with individual performance (Aiken & West, 1991). These results support Hypothesis 2. As players started to accrue transition experience, they experience increased efficiency, a finding consistent with the notion that players develop a better sense of which skills they can apply universally and which ones they can utilize effectively solely within the specific context associated with their previous team. Eventually, too much transition experience precipitated performance declines, consistent with the notion that these players cannot develop role clarity or skills linked to a consistent rapport with a specific set of teammates. Results suggest the peak benefit occurs at approximately the fourth transition of a player (more precisely at a transition
experience value of 3.78 with a corresponding 5.65 marginal efficiency value) with declines in efficiency occurring thereafter.

Figure 1 illustrates the predicted curvilinear effects (both supported) for related task experience and transition experience on player efficiency.

**Team Oriented Performance**

More team oriented performance was examined using players’ coordination as the dependent measure. Both previous coordination \((B = 0.56, p < 0.001)\) and minutes per game \((B = 0.01, p < 0.001)\) had a significant, positive effect on players’ assist to turnover ratio. Similar to the first measure, both prior performance and more playing time predicted this more team oriented measure of performance.

It is interesting to note that related task experience and related task experience\(^2\) show no significant effects on this performance measure based on coordinated activities with teammates (both \(p’s > .34\)), providing no additional support for Hypothesis 1 (see Figure 2). This finding seems to strengthen the claim that it is fundamentally important to differentiate the effects of related task experience and transition experience, especially when focusing on more team oriented measures of performance.

As shown in Table 2, the effects of transition experience \((B = 0.06, p < 0.05)\) and transition experience\(^2\) \((B = -0.01, p < 0.01)\) remain significant predictors of the measure associated with more team based performance. This curvilinear, inverted U-shaped effect supports Hypothesis 2 (see Figure 2 for the plot of this predicted relationship). Greater transition experience initially increases a player’s assist to turnover ratio as players leverage insights gained about their absolute and teammate specific skills. However, after transitioning between teams many times, players experience a discontinuity that hinders
coordination with new teammates. Similar to the player efficiency dependent measure used in the first analyses, the benefits of transition experience on the coordination measure appear to peak at approximately the fourth player transition (more precisely at a transition experience value of 3.77 with a corresponding 0.43 marginal coordination value) before starting to decline for subsequent transitions.

**Discussion**

This study examines the effects that different components of individual experience have on the performance of newcomers. In doing so, the impact of related task experience is contrasted from the impact of the important, though less obvious, construct of transition experience. This distinction provides some important clarifications to findings such as those chronicled by Reagans, Argote, and Brooks (2005), who proposed a relatively complex relationship between task experience and performance. Instead, such findings actually indicate a need to further distinguish between different categories within individual experience itself. The results along those prescribed lines found in this study complement prior work documenting the problems related task experience can pose for individuals attempting to leverage that experience in new group environments (e.g., Huckman & Pisano, 2006; Dokko, Wilk, & Rothbard, 2009).

Whereas those studies addressed the maladaptive effects of related task experience gained in previous groups, the results of the current study suggest that individuals at the same time may develop other skills that are more conducive to performance in their new groups. Tasks that require coordinated group effort combine experience performing the task itself with a separate relationship component specifically centered on interactions with teammates. Individuals do not just learn how to complete a
certain task in an absolute, universal sense. They learn how to do the task with specific teammates. When moving to a group with members, the newcomer may mistakenly try to use techniques with new teammates that only work successfully with teammates in their previous groups. However, an individual that has already experienced moving from one group to another (and possibly additional groups before that one) likely has developed a sense of what techniques fall in each category. As a result, they can better differentiate between universal and teammate-specific skills and employ them accordingly. This transition experience thus enhances performance and allows newcomers to assimilate more effectively by drawing upon their prior experiences as newcomers.

This is in stark contrast to the way people often perceive such mobile newcomers. For instance, observers often deride players who have moved around in the NBA with labels like journeyman and vagabond (Markazi, 2010). These labels often connote a significant inferiority about these players and a low probability that they will perform well on their new teams. The study presented here shows that even though that may be the case for extremely transient players, those players with moderate degrees of transition experience may actually prove better additions to teams than their less traveled counterparts. Whereas attention often focuses on how individual “stars” translate their talents to new group environments (Groysberg et al., 2008; Groysberg & Lee, 2009), the current paper builds on the notion that more “rank and file” members deserve scrutiny and attention due to the potential positive contributions they can make to their new groups.

While the effects of transition experience were relatively consistent across the two performance measures utilized, it is noteworthy that the same did not hold true for related
task experience. Results supported the hypothesized curvilinear relationship between related task experience and the efficiency performance measure but not the coordination measure (for which there was no significant relationship at all). This at least in part may stem from the fact that PER offers a more global individual performance metric whereas the assist to turnover ratio is more closely associated with specific individual actions taken in conjunction with teammates. Therefore it is possible that “oldtimer” teammates may compensate for the inefficient actions of the newcomers by leveraging the effective knowledge bases that they have developed (e.g., Berman et al., 2002; Weick & Roberts, 1993), thus neutralizing the negative effects of related task experience as reflected in this latter performance measure. If negative effects do materialize it even may be the case that they are captured in the performance of those oldtimers attempting to compensate for the actions of their new teammates rather than the offending parties themselves, as those oldtimers can rely on obsolete schemas that impair performance after membership changes (Lewis, Belliveau, Herndon, & Keller, 2007).

These discrepancies further suggest that the NBA context used in this paper, while a useful setting to examine effects of prior experience of various types because it captures performance dependent on teammate interactions and groups undergoing regular membership change, may generalize to some group contexts but not others. The NBA features teams consisting of members with differentiated and highly interdependent roles (Beauchamp and Bray, 2001; Pescosolido & Saavedra, 2012). As a highly interdependent group context, the relationship between team cohesion and performance was likely a more significant factor here than it would be in some more loosely connected group environments (see Gully, Devine & Whitney, 2012). With this in mind, findings should
apply to organizational contexts featuring similarly interdependent collectives such as development teams (e.g., Katz, 1982) and surgical teams (e.g., Reagans et al., 2005), rather than those comprised of more autonomous actors like the call center workers of Dokko et al. (2009).

**Limitations and Future Directions**

A few other limiting features of the NBA context warrant mention. For instance, performance metrics useful for evaluating player performance in the NBA are somewhat removed from standard performance indicators of learning, such as reductions in errors or declining completion times (Argote, 1999). Performance in the NBA, though heavily influenced by cognitive processes, is still extremely physical in nature. This means that certain effects on performance (such as those found for experience) may be confounded with declines associated with the wear and tear of continual play in a strenuous athletic league. This issue should not interfere with most other task environments of interest.

Players’ NBA careers often follow extensive prior experience (e.g., playing basketball in high school, college, or international leagues). It is therefore quite possible that players have been faced with transition experiences at these other levels of basketball development, which may interfere with documenting the effects of various types of experience associated with player migration across the NBA. Although this is an important caveat to note when interpreting the results of the current study, it should not undermine the results significantly for a number of reasons. First, this constraint means that the current data represents a conservative test of the hypotheses, as more novice players likely would experience even greater difficulties changing teams, thus increasing the role of transition experience in their subsequent performance. Second, one reasonably
can argue that the NBA represents a relatively novel task compared to other (often lower quality) levels of competitive basketball that do not require or promote the development of the same skill sets (Clark, 2009). Such a substantial transition to the rigors of the NBA involves sizeable challenges both on and off the court (Remme, 2013; Zola, 2012). Even though the knowledge and skills conducive to successful performance in the NBA will mirror those needed at these other levels, the translation of these attributes is by no means a perfect one (Coates & Oguntimein, 2010). Thus, circumstances result in many players essentially starting over to at least some degree upon arrival in the NBA. Third, one could raise similar concerns for most dynamic group environments, whether individuals are playing basketball, completing surgical procedures, performing in musical ensembles, or developing new software products. In each case, individuals inevitably will import undocumented experience gained prior to their professionally documented activities. Therefore, in such important respects, the NBA does not differ significantly from other group contexts of interest.

The current study also limited analysis to players that remained on a given team for an entire season from start to finish. This inclusion rule was used to homogenize the transition that each player faced. Mid-season trades carry a host of additional professional (such as moving from a team at the bottom of the league to one in playoff contention or vice versa) and personal (either uprooting one’s family or being separated from them geographically) challenges for which it would be difficult to control. Therefore, the current data does not fully represent the entire range of player movement possible in the NBA. Similarly, the measure of transition experience utilized here treats past transitions uniformly whether they occurred between or during seasons as well as via free agency or
trade. For the purposes of establishing transition experience as a viable construct in this initial study, such a broad operationalization seems acceptable. Future studies could distinguish characteristics of the transition more formally, for example its timing (e.g., before or during an iteration of group activity) and type (e.g., voluntary or forced movement between groups), to assess whether such factors moderate the effect of transition experience on newcomer performance.

It also would be useful to explore transition experience in laboratory studies. Prior research has used this kind of controlled setting effectively to draw meaningful insights into the newcomer assimilation process (e.g., Choi & Levine, 2004; Kane, Argote, & Levine, 2005) and shows promise for doing so with transition experience as well. For example, studies could test some of the underlying relationships between transition experience and performance. Transition experience may allow newcomers to better navigate the surprise and sense making associated with their arrival in a new group (Louis, 1980). Research that probes these relationships directly or proposes other relevant mechanisms clearly is necessary as the study of transition experience progresses.

Such controlled studies could establish the causal link between transition experience and performance more conclusively. Although the NBA data discussed in the current study suggest transition experience can improve performance, their archival nature prevents ruling out entirely the reverse causality, namely that those able to achieve higher levels of performance as newcomers are afforded more opportunities to join new groups. As Levine and Moreland (1999) observed, “If newcomers have been successful in similar groups, then they are likely to have most if not all of the personal qualities that the new work group will demand” (p. 279). Some results from the current study do not
support this reverse causality argument, such as the curvilinear effect found for transition experience. In addition, by this reverse causality account one should expect an interaction between transition experience and related experience, yet supplemental analyses reveal no significant interaction between the two. Despite these factors, a controlled experiment (perhaps measuring performance more frequently during the early stages of newcomer assimilation) that addresses these issues would be worthwhile.

Other extensions may examine the relationship between transition experience and knowledge breadth. It reasons that the adaptation process will present different opportunities for players that we can describe as generalists than it does for those we can describe as specialists (see Kang & Snell, 2009). Individuals with a wide range of knowledge and skills will have more opportunities to fill in the gaps of existing group members’ talents, as well as the wherewithal to do so. However, these generalists may flounder because they do not have adequate direction as to what specific attributes they should cultivate in the new group. Conversely, those with specialized knowledge (e.g. NBA players who act primarily as shooters or defenders, academic researchers who concentrate on writing or statistical analyses, line cooks who focus on chopping vegetables or cutting meat) have a distinct area in which they can channel their efforts. This could allow them to produce immediately with relatively little need for skill translation. At the same time, these specialists may fail to expand their roles to new areas if they encounter initial setbacks in their original areas of specialization. It is possible that the types of experience described in the current study may help to strengthen the benefits of each category while attenuating the negative aspects. Examining the relationship
between transition experience and performance with respect to the generalist/specialist dichotomy presents another promising advancement of the work begun here.

The current study illustrates the positive effect that transition experience can have on performance dealing with coordinated actions between teammates. These findings imply that transition experience may benefit teammate performance as well. If transition experience increases the ability to recognize (and discard) strategies that worked exclusively with a previous set of teammates, it simultaneously aids the individual and the teammates coordinating with that individual. For example, a basketball player who learns through his transition experience that a “bounce” pass will prove more effective than a “lob” pass with new teammates increases not only his own performance (e.g., by eliminating turnovers) but also that of his teammates (e.g., by putting them in better positions to score points). It may very well be the case that the benefits of transition experience are not reserved for the individuals possessing it.

Conclusion

The findings offered here present some compelling implications for organizational decision making. When groups must introduce new members, they should give serious consideration not just to an individual’s overall level of skill and experience, but also the extent to which that individual already has needed to adapt those skills to a new group environment. The transition experience accumulated by the individual appears to be a key facilitator of this adaptation. Prospective members richer in transition experience may complete the necessary transition more effectively, enhancing their own performance and ultimately that of their new group or organization.
References


Groysberg, B., & Lee, L. (2009). Hiring stars and their colleagues: Exploration and


**Author Biography**

**Joseph R. Radzevick** (PhD, Carnegie Mellon University) is an assistant professor in the Department of Management at Gettysburg College, USA. His research focuses on behavioral decision making, including the topics of overconfidence, trust, comparative judgment, learning, and rumination.
Table 1

Descriptive Statistics and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Efficiency</td>
<td>11.29</td>
<td>6.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Coordination</td>
<td>1.40</td>
<td>0.98</td>
<td>.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Related task experience</td>
<td>6.01</td>
<td>4.03</td>
<td>.00</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Transition experience</td>
<td>1.79</td>
<td>1.86</td>
<td>-.12</td>
<td>.03</td>
<td>.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Guard</td>
<td>0.42</td>
<td>0.49</td>
<td>.04</td>
<td>.53</td>
<td>-.08</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Free agent</td>
<td>0.70</td>
<td>0.46</td>
<td>-.17</td>
<td>.02</td>
<td>.00</td>
<td>.17</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Minutes per game</td>
<td>17.66</td>
<td>9.58</td>
<td>.45</td>
<td>.17</td>
<td>.10</td>
<td>-.18</td>
<td>.07</td>
<td>-.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Previous efficiency</td>
<td>11.90</td>
<td>5.15</td>
<td>.26</td>
<td>.03</td>
<td>.10</td>
<td>-.08</td>
<td>.03</td>
<td>-.23</td>
<td>.42</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Previous coordination</td>
<td>1.39</td>
<td>0.97</td>
<td>.09</td>
<td>.57</td>
<td>.09</td>
<td>.08</td>
<td>.54</td>
<td>-.01</td>
<td>.16</td>
<td>.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Previous win shares</td>
<td>5.85</td>
<td>6.40</td>
<td>.30</td>
<td>.09</td>
<td>.26</td>
<td>-.10</td>
<td>-.05</td>
<td>-.33</td>
<td>.64</td>
<td>.54</td>
<td>.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Previous minutes per game</td>
<td>18.59</td>
<td>9.70</td>
<td>.29</td>
<td>.11</td>
<td>.29</td>
<td>-.06</td>
<td>.03</td>
<td>-.36</td>
<td>.66</td>
<td>.47</td>
<td>.19</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Team previous win percentage</td>
<td>0.50</td>
<td>0.16</td>
<td>.01</td>
<td>-.02</td>
<td>.15</td>
<td>.08</td>
<td>-.03</td>
<td>.06</td>
<td>-.07</td>
<td>.03</td>
<td>.00</td>
<td>.06</td>
<td>.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Previous newcomers</td>
<td>7.93</td>
<td>3.37</td>
<td>-.01</td>
<td>-.03</td>
<td>-.04</td>
<td>-.03</td>
<td>-.03</td>
<td>-.02</td>
<td>-.03</td>
<td>.07</td>
<td>.03</td>
<td>-.01</td>
<td>.02</td>
<td>.00</td>
<td>-.43</td>
</tr>
<tr>
<td>14. Team win percentage</td>
<td>0.50</td>
<td>0.16</td>
<td>.03</td>
<td>.02</td>
<td>.18</td>
<td>.07</td>
<td>-.02</td>
<td>.08</td>
<td>-.08</td>
<td>.05</td>
<td>.04</td>
<td>.11</td>
<td>.15</td>
<td>.67</td>
<td>-.27</td>
</tr>
</tbody>
</table>

Note. N = 1683. Dummy variable for guard and free agent. Correlations > |.05| are significant at p < .05.
Table 2

*Results of Regression Analyses for Individual Performance (Efficiency)*

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>Robust SE</td>
<td>Coeff.</td>
</tr>
<tr>
<td>Constant</td>
<td>4.21***</td>
<td>(1.29)</td>
<td>4.37***</td>
</tr>
<tr>
<td>Guard</td>
<td>0.02</td>
<td>0.26</td>
<td>-0.02</td>
</tr>
<tr>
<td>Free agent</td>
<td>0.06</td>
<td>0.27</td>
<td>0.11</td>
</tr>
<tr>
<td>Minutes per game</td>
<td>0.30***</td>
<td>0.04</td>
<td>0.29***</td>
</tr>
<tr>
<td>Previous efficiency</td>
<td>0.12*</td>
<td>0.05</td>
<td>0.12*</td>
</tr>
<tr>
<td>Previous win shares</td>
<td>0.01</td>
<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Previous minutes per game</td>
<td>-0.05*</td>
<td>0.02</td>
<td>-0.04</td>
</tr>
<tr>
<td>Team previous win percentage</td>
<td>-0.72</td>
<td>1.40</td>
<td>-0.67</td>
</tr>
<tr>
<td>Previous newcomers</td>
<td>-0.06</td>
<td>0.05</td>
<td>-0.06</td>
</tr>
<tr>
<td>Team win percentage</td>
<td>2.36</td>
<td>1.64</td>
<td>2.51</td>
</tr>
<tr>
<td>Related task experience</td>
<td>-0.06</td>
<td>0.04</td>
<td>-0.45***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Transition experience</td>
<td>-0.01</td>
<td>0.08</td>
<td>0.43*</td>
</tr>
<tr>
<td>Related task experience²</td>
<td></td>
<td></td>
<td>0.02***</td>
</tr>
<tr>
<td>Transition experience²</td>
<td></td>
<td></td>
<td>-0.06*</td>
</tr>
</tbody>
</table>

| $R^2$                     | .23 | .24 | .24 |

*Note. N = 1683. Controls for team and year are included in all models but are not shown. Standard errors clustered by individual players.*

† $p < .10$.  *$p < .05$.  **$p < .01$.  ***$p < .001$.  

Table 3

Results of Regression Analyses for Team Oriented Performance (Coordination)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th></th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.</td>
<td>Robust SE</td>
<td>Coeff.</td>
<td>Robust SE</td>
<td>Coeff.</td>
<td>Robust SE</td>
</tr>
<tr>
<td>Constant</td>
<td>0.37</td>
<td>(0.24)</td>
<td>0.36</td>
<td>(0.24)</td>
<td>0.34</td>
<td>(0.25)</td>
</tr>
<tr>
<td>Guard</td>
<td>0.62***</td>
<td>0.09</td>
<td>0.63***</td>
<td>0.09</td>
<td>0.63***</td>
<td>0.09</td>
</tr>
<tr>
<td>Free agent</td>
<td>0.12***</td>
<td>0.03</td>
<td>0.11***</td>
<td>0.03</td>
<td>0.11***</td>
<td>0.03</td>
</tr>
<tr>
<td>Minutes per game</td>
<td>0.01***</td>
<td>0.00</td>
<td>0.01***</td>
<td>0.00</td>
<td>0.01***</td>
<td>0.00</td>
</tr>
<tr>
<td>Previous efficiency</td>
<td>0.39***</td>
<td>0.07</td>
<td>0.38***</td>
<td>0.07</td>
<td>0.38***</td>
<td>0.07</td>
</tr>
<tr>
<td>Previous win shares</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Previous minutes per game</td>
<td>-0.01†</td>
<td>0.00</td>
<td>-0.01†</td>
<td>0.00</td>
<td>-0.01†</td>
<td>0.00</td>
</tr>
<tr>
<td>Team previous win percentage</td>
<td>-0.30†</td>
<td>0.17</td>
<td>-0.31†</td>
<td>0.17</td>
<td>-0.32†</td>
<td>0.17</td>
</tr>
<tr>
<td>Previous newcomers</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Team win percentage</td>
<td>0.34*</td>
<td>0.14</td>
<td>0.33*</td>
<td>0.15</td>
<td>0.34*</td>
<td>0.15</td>
</tr>
<tr>
<td>Related task experience</td>
<td>0.62</td>
<td>0.09</td>
<td>0.00</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>Variable</td>
<td>Estimate 1</td>
<td>Estimate 2</td>
<td>Estimate 3</td>
<td>Estimate 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transition experience</td>
<td>0.01</td>
<td>0.01</td>
<td>0.04†</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Related task experience²</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transition experience²</td>
<td></td>
<td></td>
<td>-0.01*</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.44</td>
<td>.44</td>
<td>.44</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 1683. Controls for team and year are included in all models but are not shown. Standard errors clustered by individual players. 
† $p < .10$.  *$p < .05$.  **$p < .01$.  ***$p < .001$.*
Figure 1. Predicted relationships between experience types and individual performance measure (efficiency).
Figure 2. Predicted relationships between experience types and team oriented performance measure (coordination).