CAN YOU GO HOME AGAIN? PERFORMANCE ASSISTANCE BETWEEN

BOOMERANGS AND INCUMBENT EMPLOYEES

Thorsten Grohsjean
Department of Management & Technology and ICRIOS
Bocconi University
thorsten.grohsjean@unibocconi.it

Gina Dokko
Graduate School of Management
University of California, Davis
gdokko@ucdavis.edu

Philip Yang
Faculty of Business Administration and Economics
Paderborn University
philip.yang@uni-paderborn.de

ABSTRACT

Boomerangs, i.e., rehires, should have advantages over other new hires when integrating into an organization due to their familiarity with the work context and their pre-existing relationships. However, research suggests that the effects of hiring boomerangs may not be straightforwardly positive. To better understand these effects, we investigate how boomerangs' social integration into a work team differs from that of other new hires due to their pre-existing relationships and how those relationships shape their and incumbents' competence and motivation to provide assistance for collective performance. We theorize and find that boomerangs, compared to new hires, exhibit more performance assistance toward incumbent former and incumbent new colleagues. In contrast, incumbent former colleagues do not direct their performance assistance toward boomerangs, contrary to our prediction, nor do incumbent new colleagues. This study contributes to the nascent literature on boomerangs and the literature on job mobility by finding evidence that prior relationships condition the behavior of both boomerangs and incumbents.

INTRODUCTION

As job mobility becomes increasingly accepted at all stages of careers (Arthur 2008, Bidwell and Briscoe 2010), understanding how new organizational members integrate into workgroups is more important than ever. Individuals moving into organizations must learn "how things are done" at their new employer and develop relationships with incumbent colleagues (Ashforth, Sluss, and Harrison 2007, Fang, Duffy, and Shaw 2011). Having or forming relationships with incumbent colleagues can be especially important in enabling socialization and learning for new hires (Morrison 2002, Bauer, Bodner, Erdogan, Truxillo, and Tucker 2007). Specifically, studies of job mobility and performance portability for experienced workers have found that joining organizations with pre-existing relationships benefits a range of individual and organizational outcomes. For example, research has found moving with co-workers (Campbell, Saxton, and Banerjee 2014, Marx and Timmermans 2017, Raffiee, Ganco, and Campbell 2020, Honoré 2022), prior collaborations with employees at the new organization (Campbell, Di Lorenzo, and Tartari 2021, Piezunka and Grohsjean 2023), or referral hiring (Castilla 2005, Pieper, Trevor, Weller, and Duchon 2017) can positively affect outcomes as diverse as performance, innovation, and turnover. These studies provide some evidence that pre-existing relationships have benefits that can enable organizations to better realize the advantages of hiring experienced workers (Groysberg, Lee, and Nanda 2008). Yet, few mobility studies have delved into how relationships enable performance or explicitly considered the social integration challenges new hires face.

To study how relationships facilitate new hire integration, we examine a specific cooperative behavior, which we call performance assistance. Performance assistance is the help that colleagues provide each other to enable them and the group or organization to perform (Morrison 1994, Penner, Dovidio, Piliavin, and Schroeder 2005). Although it is a regular part of many jobs, there is often discretion in whom to assist and how much effort to expend in these behaviors, making it an appropriate outcome for studying how relationships affect integration behavior. In addition, we consider new hire integration from the perspective of both movers and incumbents. Understanding both perspectives is essential, as moving between firms disconnects a mover's day-to-day relationships and disrupts the larger social context of

work and relationships in an organization. Especially in contexts where work is interdependent and performance depends on cooperative behavior, it is not only the mover's behavior that affects integration. Incumbent colleagues' behavior toward the mover should also play a role. We thus study how pre-existing relationships affect performance assistance between movers and incumbents.

We use the phenomenon of boomerang workers to better understand the role that relational factors play in integrating new hires. Boomerangs, i.e., workers who return to an employer after employment elsewhere (Shipp, Furst-Holloway, Harris, and Rosen 2014), offer a unique opportunity to examine new hires' relationships. They already have organization- and colleague-specific knowledge and skills (Arnold, Van Iddekinge, Campion, Bauer, and Campion 2021, Keller, Kehoe, Bidwell, Collings, and Myer 2021), yet they can also have social relationships from their prior tenure that can facilitate their transition into an organization, making them different from true newcomers. Moreover, due to turnover while boomerangs were away, there can be both pre-existing and new relationships between boomerangs and incumbents. We take advantage of staffing changes while the boomerang was away to isolate the role of relational familiarity in performance assistance behavior. We contrast boomerang behavior toward incumbents with the behavior of true newcomers toward incumbents, and vice versa, to develop insights into how relational familiarity might ease the transition into an organization.

Drawing on research on newcomers in organizations (e.g., Morrison 1993b, Rink, Kane, Ellemers, and Van der Vegt 2013), we develop a theoretical account of how performance assistance behavior from and towards boomerangs differs from that of other new hires. Because boomerangs have prior experience in an organization, they have some understanding of incumbent colleagues' knowledge and skills, as well as motivation to help. We propose that these differences in colleague-specific *competence* and *motivation* lead to differences in performance assistance behavior. In addition, social acceptance is a key indicator of newcomer adjustment (Bauer et al. 2007), suggesting that research on incumbent reactions to newcomers (Rink et al. 2013) can help to illuminate distinctions between boomerangs and true newcomers in the performance assistance they receive.

We examine these issues in the context of the National Basketball Association (NBA). Although sports data has limitations regarding generalizability, this setting offers the rare opportunity to study real behavior in a real work setting. Observing a behavioral outcome like performance assistance provides insight into how movers (re-)integrate into their work context. Further, as the careers of all NBA players are meticulously recorded, we can examine behaviors related to newcomer integration for both movers and incumbents. In addition, the fact that NBA players' work is highly standardized enables our focus on relational aspects of newcomer integration without the confounds introduced by differences in job content across contexts, even for the same occupation (Cohen 2013).

This study contributes to research on job mobility by focusing on relational behavior during transition into organizations. First, by finding that boomerangs exhibit more performance assistance than other new hires, we provide evidence for a behavioral mechanism affecting integration into a new work context. On top of explanations related to knowledge and skills or simply having relationships, we show that the effects of mobility could depend on how movers behave toward incumbents. Second, relationships are two-sided, and our finding that neither incumbent former nor incumbent new colleagues assist boomerangs as much as they assist other new hires highlights the value of including incumbents in models of job mobility's effects. As boomerangs assist at a high level, the asymmetry between the behavior of boomerangs and incumbents is important to recognize. Further, the finding that incumbent former colleagues do not assist boomerangs as much as they assist true newcomers is counterintuitive and contrary to our expectations since the pre-existing relationship should give them the competence and the motivation to do so. We present evidence suggesting that lingering resentment or bad feelings may explain why boomerangs receive less performance assistance than other new hires. These findings suggest that incumbent behavior toward movers can be a source of performance loss that prevents the full benefits of mobility from being realized. Finally, our results contribute to the understanding of boomerang mobility by suggesting a behavioral mechanism that impacts their re-integration into organizations and possibly explains their effects on performance – hiring boomerangs helps organizations because boomerangs are more helpful to others.

THEORY AND HYPOTHESES

Performance assistance

Effectiveness at work often depends on getting assistance from peers (McDonald, Keeves, and Westphal 2018). Hence, assistance from movers to incumbent colleagues and vice versa represents an important behavioral outcome for understanding how job mobility influences performance for movers and the workgroups or organizations they join. Although helping others at work has often been studied as extra-role behavior (Organ 1988), assisting colleagues can also be in-role behavior and is often perceived as such by the role-holders (Morrison 1994). Helping others at work is an essential aspect of contextual performance, i.e., performance that benefits the workgroup or organization (Borman and Motowidlo 1997). Organizations can even have incentives for employees to help one another, especially when interdependence is high (Bamberger and Levi 2009). Even roles that primarily consist of individual contribution often have a helping component that can be explicitly part of job requirements, e.g., mentoring or service. We thus define performance assistance as in-role behavior that helps co-workers perform their production-related responsibilities to benefit the workgroup or organization.

In addition, we conceptualize performance assistance as being directed at a person rather than a collective. Though performance assistance may ultimately benefit groups or organizations, employees often have a choice about which colleague(s) to help. Directing performance assistance toward specific others can also allow assisters to choose where their efforts will most likely result in better outcomes for the collective, such as where assistance can result in synergies or alleviate bottlenecks. Alternatively, research in social psychology on person-to-person helping behavior (Penner et al. 2005) suggests that factors like similarity and relationship quality will condition when and whom to help.

Boomerangs and true newcomers as mobile workers

The paucity of research on boomerangs belies their importance as a phenomenon. Practitioner sources estimate that 10-20% of new hires are boomerangs, consistent with the proportion of boomerang hires in published research (e.g., Loan-Clarke, Arnold, Coombs, Hartley, and Bosley 2010, Swider, Liu, Harris, and Gardner 2017, Keller et al. 2021). For researchers, studying boomerangs has the added benefit of

enabling the exploration of theoretical mechanisms of job mobility. For instance, Keller et al. (2021) theorized and found that organization-specific knowledge led boomerangs to perform better than other new hires, especially when their job required internal coordination.

Considering relational factors in job mobility raises a particularly sharp contrast between boomerangs and true newcomers. In addition to familiarity with the context of work and possibly the job itself, boomerangs may have worked with the incumbents in their previous stint in the organization. This personal experience working with incumbent colleagues could give them colleague-specific human capital (Campbell et al. 2014), where co-workers are familiar with each other's strengths and weaknesses in a way that benefits coordinated work. Prior experience working together also suggests actual social relationships with incumbents, giving them resources from ties that have been maintained (Corredoira and Rosenkopf 2010). Though true newcomers may also have existing social ties if they were hired through referrals (Castilla 2005) or found out about the job through social ties (Granovetter 1974), ties of boomerangs who worked in the firm previously are likely to be more numerous and widespread than those of true newcomers. Even ties that have gone dormant can often be rekindled (Levin, Walter, and Murnighan 2011), enhancing the value of a boomerang's relationships for re-entering a firm.

When entering (or re-entering) a firm, the socialization and social integration experiences of boomerangs should differ from those of true newcomers. Though the literature on mobility has shown that relationships improve the portability of performance (e.g., Groysberg and Lee 2009, Campbell et al. 2014), it does not address the more common problem of integrating new hires into existing workgroups. Because turnover occurs while the boomerang is away, studying boomerangs enables examination of how pre-existing relationships function differently from new relationships following entry into a group. To understand the role of relational familiarity in mobility events, we predict how boomerangs, as compared to true newcomers, behave toward incumbent former and incumbent new colleagues and how these incumbent colleagues behave toward boomerangs, as compared to true newcomers. Though true newcomers do not distinguish between a boomerang's former and incumbent colleagues, we use them to provide a comparison with boomerangs and highlight how boomerangs differ from other hires.

Integrating newcomers into work groups

To become full members of an organization, newcomers need to socialize into the organization, i.e., socially integrate and learn how things are done (Ashforth et al. 2007, Fang et al. 2011). Newcomer adjustment, including learning the context and social integration, has implications for an individual's career success and outcomes at the group and organization levels (Morrison 2002, Fang et al. 2011, Rink et al. 2013). As much work is done in teams, social integration and accompanying behaviors typically happen at the workgroup level (Beus, Jarrett, Taylor, and Wiese 2014). Social integration requires newcomers to show social interest in the group to signal commitment and willingness to contribute to group outcomes and be accepted by the incumbent group members (Moreland and Levine 2002). Newcomers can show social interest upon entry by proactively using integration strategies, i.e., behaviors focused on becoming part of the group or enhancing group outcomes (Kane and Rink 2015). The proactive use of integration behaviors, specifically helping behavior, can develop positive relationships between newcomers and incumbents (Jia, Zhong, and Xie 2021).

Though all newcomers face social integration challenges, the integration challenges of boomerangs should differ substantially from those of true organizational newcomers. Specifically, boomerangs may face a lower integration challenge to learn organization-specific knowledge, but their integration may be more relationally complex than that of true newcomers. Boomerangs know the work context, so they can allocate less attention and effort to learning organization-specific or sometimes even job-specific knowledge. However, they must build new working relationships, rekindle old ones, and manage issues that arise from balancing these two social tasks. Therefore, they may expend more effort and attention toward the relational aspects of integration using prosocial behaviors like performance assistance rather than integration behaviors that true newcomers may use, like saying "we" (Kane and Rink 2015), or information seeking (Morrison 1993a). Further, boomerangs may be more motivated than true newcomers to provide assistance, since team members who rejoin teams are more likely to be committed to the team (Ray and Mackie 2009). Even if their knowledge of the context is not current, they are likely to prioritize the relational aspect of social integration simply because context is not as salient as other people when the

context is already familiar. By contrast, true newcomers must learn about the context and their new colleagues as well as build relationships to integrate into the team. Therefore, all newcomers face integration challenges, but the challenges differ for boomerangs and true newcomers, and boomerangs and true newcomers may use performance assistance behaviors to integrate for different reasons.

Performance assistance from boomerangs to incumbents

With respect to incumbent former colleagues, boomerangs may be more likely than true newcomers to provide performance assistance because they have more specific reasons to believe their assistance will result in better outcomes, i.e., they have greater *competence* in helping. Because they worked together in the past, boomerangs should be familiar with the knowledge and skills of an incumbent former colleague so that they are better able to provide assistance when and where it will be effective. Colleague-specific human capital is "an individual's knowledge, skills, abilities, and other characteristics related to the identification and operationalization of opportunities for complementarities with specific colleagues" (Campbell et al. 2014: 536), giving boomerangs a form of interpersonal competence when working with incumbent former colleagues.

In addition to having competence to help, boomerangs may be more *motivated* than true newcomers to provide assistance to their incumbent former colleagues to renew or repair relationships that were disrupted when the boomerang left and to reaffirm their commitment to the group's success. Social capital loss associated with turnover can lead to performance loss for teams or other collectives (Shaw, Duffy, Johnson, and Lockhart 2005, Li and Knippenberg 2021), and turnover can lead to a loss of competitive advantage if resources associated with co-specialized individuals were disrupted by the move (Coff and Kryscynski 2011). If the boomerang's departure left incumbent team members short on skills or other resources, displaying a willingness to help incumbent former colleagues perform can be a way for a boomerang to repair relationships. Providing proactive assistance to former colleagues can remind them of the boomerang's former status as a team member and help reestablish dormant relationships.

> *Hypothesis 1: Boomerangs will provide more performance assistance to incumbent former*
>
> *colleagues than true newcomers do.*

When faced with incumbent new colleagues, neither boomerangs nor true newcomers have pre-existing relationships. As a result, neither has colleague-specific *competence* that would shape their performance assistance activity. However, boomerangs' familiarity with the organization-specific context of work can enable them to prioritize developing relationships with incumbent new colleagues and learning how to work with them. By contrast, true organizational newcomers need to learn the organization-specific context of work, including the physical space, organizational culture, processes, and practices, on top of developing new relationships with all incumbents. For example, organizational newcomers may review policies and procedures handbooks or websites to ensure they understand benefits and incentives, expense reporting, and other administrative processes. Accordingly, their attention must be split between learning about the organization and building new relationships, while boomerangs can focus on developing colleague-specific competence.

Boomerangs may also be more *motivated* to provide performance assistance to incumbent new colleagues than true newcomers are. Boomerangs must demonstrate their desire to fit into the team as it is currently composed by showing incumbent new colleagues that they are as important as targets of performance assistance as former colleagues are. Further, boomerangs may be at a later career stage when performance assistance, including mentorship or advice-giving, could be natural for their career stage (Haggard, Dougherty, Turban, and Wilbanks 2011). To the extent that incumbent colleagues who joined the organization after a boomerang's first stint are more junior, the boomerang may be more inclined to expend effort on performance assistance toward them.

> *Hypothesis 2: Boomerangs will provide more performance assistance to incumbent new*
> *colleagues than true newcomers do.*

We argue that boomerangs have reasons to provide more performance assistance to incumbent former and incumbent new colleagues. However, there is no apparent systematic basis on which to weigh the competence- and motivation-based positive effects of having existing relationships with incumbent former colleagues versus the motivation to build new relationships with incumbent new colleagues. Even with no competence-based reason to provide performance assistance to incumbent new colleagues, the

motivation to build relationships with them or the effort required to build these relationships may result in more performance assistance. Therefore, we cannot predict the relative magnitude of assistance to different types of incumbent colleagues.[1]

Performance assistance from incumbents to boomerangs

While newcomers have strong incentives to integrate into teams, incumbents also have reasons to welcome newcomers, especially when performance depends on teamwork. Since most teams experience membership changes (Li and Knippenberg 2021), the ability to incorporate new team members is a critical part of group functioning (Moreland and Levine 1982). Despite the prevalence of membership change in teams, it has been shown to disrupt group processes like transactive memory (Argote, Aven, and Kush 2018) and coordination (Summers, Humphrey, and Ferris 2012). This disruption can lead to new conversations and routines and enable innovation in the longer-term (DeRue, Hollenbeck, Johnson, Ilgen, and Jundt 2008, Chen and Garg 2018). However, membership change can also be experienced as costly, and lead to decreased team performance, especially in the shorter-term (Li and Knippenberg 2021). Indeed, a large body of research on teams shows that there is resistance to newcomers from within existing teams (Rink et al. 2013). Generally, integrating newcomers is costly to a group, and newcomers can be viewed with some suspicion until they are socially integrated (Cimino and Delton 2010). For example, groups often discount or disregard the diverse knowledge brought by newcomers (Rink et al. 2013). However, if the newcomer is known, like boomerangs are, incumbents may be less resistant.

There is little to no research about how incumbents react to returning team members. However, incumbents who worked with a boomerang previously may look more favorably on and provide more performance assistance to boomerangs than true newcomers because they have the *competence* to do so. Colleague-specific human capital goes both ways, and incumbent former colleagues have colleague-specific knowledge and skills about boomerangs, too (Campbell et al. 2014), which should make

---

[1] We tested for a difference between assistance to incumbent new versus incumbent former colleagues and found no statistical difference (see Appendix A1). This non-finding is theoretically interesting, as it suggests that boomerangs employ the same behavioral strategy of performance assistance for both rekindling older relationships and building new ones and that they take a proactive approach to both tasks.

boomerangs a target of performance assistance because of a greater likelihood that their assistance will be effective for generating team performance.

In addition to competence-based reasons, the pre-existing relationship may also *motivate* incumbent former colleagues to direct performance assistance toward the boomerang. Even if boomerangs do not need much help integrating into the team context, there are relational factors that may outweigh a generalized wish to help a new colleague. Familiarity is valued in teams since familiarity is associated with trust and commitment (Rink et al. 2013), and the pre-existing relationships between boomerangs and their former colleagues may lead to general positive feelings. Relationships are the basis of social capital, which provides helping resources, among other things (Adler and Kwon 2002). Also, having worked together previously, the incumbent former colleagues could feel a persistent personal identification with the boomerang (Ashforth, Schinoff, and Rogers 2016) that transcends changes in employment. For instance, Grohsjean, Kober, and Zucchini (2016) found that professional hockey players competed less intensely against individual former colleagues. At the same time, group members tend to distrust true newcomers from rival outgroups (Moreland and Levine 2002). Therefore, if true newcomers join from a competitor, incumbent former colleagues may be even more likely to favor boomerangs.

> *Hypothesis 3: Incumbent former colleagues will provide more performance assistance to boomerangs than to true newcomers.*

In contrast, boomerangs are not familiar to incumbents who joined the team while the boomerang was away, so those incumbent new colleagues have no *competence*-based reason to differentiate between boomerangs and true newcomers as targets of performance assistance. However, incumbent new colleagues may have *motivation*-based reasons to help boomerangs less than true newcomers. Since incumbent new colleagues are likely to have joined the workgroup as true organizational newcomers themselves, there may be a homophily-based motivation for directing performance assistance toward true newcomers (Lawrence and Shah 2020). They may feel a personal or relational identification or empathy because of their shared experience in trying to become part of an existing team, any of which can lead to behaviors that show concern for the other's well-being (Ashforth et al. 2016).

Further, incumbent new colleagues may find interacting with boomerangs confusing or perceive it as threatening the team's established hierarchy. Relative tenure in an organization is a relevant way to distinguish newcomers and incumbents in groups, and incumbents are expected to be more socialized and knowledgeable about the context (Rollag 2004). Although boomerangs may be very knowledgeable about the context and socialized into the organizations, it is unclear how to think about the tenure of boomerangs and their relevant experience in the group, so their status as group members may seem ambiguous to incumbent new colleagues. By contrast, true newcomers are unambiguous in their status and relatively simple to understand. Therefore, incumbent new colleagues who do not have pre-existing relationships with either boomerangs or true newcomers may still prefer true newcomers as targets for assistance because they identify with them and find their status less ambiguous than a boomerang's status.

> *Hypothesis 4: Incumbent new colleagues provide less performance assistance to boomerangs than to true newcomers.*

METHODS

Setting: The National Basketball Association

We tested our predictions in the context of the National Basketball Association (NBA). The NBA is North America's premier men's professional basketball league and a suitable setting for our study for several reasons. First, NBA players are highly mobile, making it ideal for studying differences in workgroup integration. On average, roughly half the players in a team turn over every season, and 17% of all players are boomerangs. Second, basketball is particularly appealing for studying performance assistance since work is highly interdependent, and success requires cooperation. In addition, performance assistance is an in-role behavior and an essential component of individual performance. Finally, players' employment histories and gameplay behavior, including performance assistance, are extensively recorded. The data about players' employment histories allows us to track players' careers and identify boomerangs, true newcomers, incumbent former and incumbent new colleagues. We also have detailed data on the performance assistance behaviors of the players in each game.

Mobility in the NBA

The NBA Collective Bargaining Agreement regulates player mobility, including draft rights, player contracts, and salary caps (NBA 2017). Players generally change teams via free agency or trades. Free agents can join any team for an agreed contract, with some free agents restricted by their current team having a right of first refusal on new contracts (Goldberg 2008). Trades are deals in which teams exchange player contracts for one another or future draft rights (Staw and Hoang 1995). When players are under contract, their teams can trade them. NBA players must move according to completed trades, except when they have a no-trade clause in their contracts or some other situation that enables them to block trades (Stein 2017). Boomerangs enter teams through trades and free agency, like any other player, and show similar patterns for mobility. In our data 70% of boomerangs and 74% of true newcomers join teams through free agency.

Data sources and samples

We tested our hypotheses using data on the NBA between the 1996/97 and the 2018/19 seasons. Our data are primarily from Basketball Reference and Big Data Ball, which have been widely used in management research (e.g., Berman, Down, and Hill 2002, Ertug and Castellucci 2013, Campbell et al. 2014, Fonti and Maoret 2016, Chen and Garg 2018). Basketball Reference provides player-game data covering all seasons between 1970/71 and 2003/2004, as well as data on assists and the minutes on the court for each player dyad on the field in every game between 1996/97 and 2003/04. The data from Big Data Ball contains player-game data, player-season data, and play-by-play data on all actions on the court in all seasons between 2004/05 and 2018/19. Combining these data sets allows us to create a player-game data set that covers the seasons from 1970/71 until 2018/19 and a play-by-play data set that includes all the assists between players covering the seasons from 1996/97 until 2018/19. Having player-game data going back to 1970/71 allows us to identify all boomerangs that returned to their team between 1996/97 and 2018/19. We also collected information on head coaches, arenas, injuries, potential assists, drafts, and the contracts through which the true newcomers and boomerangs in our sample joined the team from several web sources, including the official NBA website, Pro Sports Transactions, and Wikipedia.

Our final data are at the dyad-game level, where each observation is an ordered pair of players from the same team who are simultaneously on the court in a game. In line with our hypotheses, we distinguish assists from player A to player B (A→B) from assists from player B to player A (B→A) and ran our regressions on different subsamples for each hypothesis. We tested the first hypothesis by restricting our sample to all assists from a boomerang or a true newcomer to an incumbent former colleague. We tested the second hypothesis by including only assists from a boomerang or a true newcomer to an incumbent new colleague. We tested the third hypothesis by including only assists from incumbent former colleagues to either boomerangs or true newcomers. Finally, to test the fourth hypothesis we only included assists from incumbent new colleagues to a boomerang or a true newcomer.[2]

All samples exclude players' rookie seasons, i.e., their first NBA season, as research suggests that rookies are systematically different from other newcomers, which may bias the results (Beus et al. 2014).[3] Also, since our theory is primarily about social integration and boomerangs and true newcomers lose their "new" status over time, we restricted our analysis to the first season a mover played for his newly (re)joined team. We exclude players on a ten-day contract with a team, a common way to address short-term staffing needs. We further restricted our analysis to games with at least one boomerang.

Dependent variable: Performance assistance

Consistent with prior research, we operationalize performance assistance in basketball as assists (Price, Lefgren, and Tappen 2013, Beus and Whitman 2017). Assists are passes that result in scoring and are a suitable proxy for performance assistance. First, assists are especially valuable passes, as they lead directly to scoring, contributing to the players' and the team's performance. Second, assists are explicitly relational, and assisters have some discretion about whom to assist. Though there could be a theoretically optimal player to assist, the speed of play and the many variables in question, e.g., competitive actions, timing within a game, the mix of players, etc., make the optimal recipient of an assist non-obvious. For

---

[2] We provide an overview of our samples in Appendix A2 in the online appendix.
[3] Including rookies in our analysis does not substantially change the results in terms of significance and size of coefficients. We present this analysis in Appendix A3 in the online appendix.

example, Willer et al. (2012) find evidence for reciprocity in assists within a game, even in the NBA's highly professionalized and high-stakes competitive environment. Our dependent variable *Number of assists* counts the number of assists from one player to another in a game.[4]

Explanatory variables

We used two dummy variables as explanatory variables. To test H1 and H2, we coded the variable *Assistant is a boomerang,* which equals one if the assistant is a boomerang and zero if the assistant is a true newcomer. This dummy was used in the restricted samples for H1 and H2 described earlier.

To test H3 and H4, we constructed the variable *Recipient is a boomerang*, which equals one if the recipient is a boomerang and zero if the recipient is a true newcomer. We used this dummy in the restricted samples for H3 and H4 described earlier.

Control variables and fixed effects

Besides our variables of interest, we included control variables that could influence assisting behavior between players. For the assistant and recipient, we controlled for their experience in the NBA, their seasonal performance, and how they joined a team. First, as players might differ in terms of assists given and received depending on their experience in the NBA, we controlled for the number of seasons a player spent in the NBA (*Assistant's NBA experience* and *Recipient's NBA experience*). Second, as better players might give and receive more assists, we also controlled for player quality by including a player's seasonal standardized player efficiency rating (PER) (*Assistant's in-season performance* and *Recipient's in-season performance*). The PER rating is an industry standard per-minute rating that sums up all a player's positive accomplishments, subtracts the negative accomplishments, and returns a per-minute rating of a player's performance. According to the NBA's website, PER is the most common way to evaluate a player's performance. Finally, we controlled for whether players joined as free agents, which may influence their motivation to provide assists to fit in or express their pleasure at joining the team. We

---

[4] We also use the sum of actual and potential assists, i.e., assists that did not result in a basket, as an alternative dependent variable in a robustness check. This analysis yields similar results in terms of size and significance for H1, H3, and H4 as our main results. Only the IRR for H2 is not statistically significant. See Appendix A4 in the online appendix.

capture this aspect by including two controls *Assistant is a free agent* and *Recipient is a free agent* that take value one if a player joined a team as a free agent and zero if a player joined via trade.[5]

At the dyad level, we included the variable *Dyad's experience outside the focal team*, coded as the number of games two players played together in other teams, to account for relational familiarity developed elsewhere. We also included two control variables at the team level. First, as prior success might influence the assisting behavior between players, we control for *Team's recent performance* by counting how many of the last ten games a team won. In addition, as research has shown across different sports contexts that teams play differently at home compared to away (Kilduff, Elfenbein, and Staw 2010, Leard and Doyle 2011, Grohsjean, Piezunka, and Mickeler 2024), we included a dummy *Team plays at home* that equals one when the dyad's team played in their home arena.[6] Finally, we also included fixed effects. First, we included person-level fixed effects for recipients for Hypotheses 1 and 2 and for assistants for Hypotheses 3 and 4 to control for unobserved time-invariant individual characteristics of a player.[7] Second, depending on the person-level fixed effects, we included fixed effects for the assistant's (H1 and H2) and recipient's position (H3 and H4) as the playing position indicates a player's role on the team, which may also influence assists between players. Third, game fixed effects help us to account for unobserved factors in a game that may affect assisting behavior.[8,9]

---

[5] In addition to controlling for assistants' and recipients' characteristics in our main analysis, we also used a matched sample approach to further account for differences between boomerangs and true newcomers as a robustness check. Results are similar in terms of size and significance to our main results. See Appendix A5 in the online appendix.

[6] We also ran robustness checks to account for differences in the team's playing style in the boomerang's first and second stint. Results are mostly consistent with our main analysis. See Appendix A6 in the online appendix.

[7] We cannot include dyad fixed effects or person-level fixed effects for assistants and recipients simultaneously, as doing so would mean that the only source of variation from our independent variables would be the few players who changed from boomerangs to newcomer status.

[8] Team-game fixed effects could replace some team-level controls and offer broader coverage of unobserved factors. We ran analysis using team-game fixed effects in Appendix A7 the online appendix. Results are consistent with the main results.

[9] To explore whether our results also hold in games with intense competition, we run robustness checks in which we control for the intensity of the game. We do not find evidence that any form of intense competition games moderates our effects. See Appendix A8 in the online appendix.

Estimation procedure

We used Poisson pseudo-maximum likelihood regressions with multi-way fixed effects and standard errors clustered at the dyad level as our primary estimation technique, as our dependent variable is a positive count variable (Greene 2008, Abadie, Athey, Imbens, and Wooldridge 2023).[10] We specified *Dyad's in-game minutes* as an exposure parameter. Specifying an exposure parameter is essential as players who spend more time together on the court have more opportunities to assist each other. *Dyad's in-game minutes* captures the minutes a pair of players spend together on the court during a game. We ran all regressions using the ppmlhdfe command in Stata 18 (Correia, Guimarães, and Zylkin 2020).

RESULTS

We report the descriptive statistics and pairwise correlations in Tables 1a-1d and the main results from our Poisson regressions in Table 2. Reported coefficients in all results tables are incidence-rate ratios (IRR), which reflect the exponential of the coefficients of the Poisson models, facilitating the interpretation of economic magnitudes. For a unit increase in an independent variable, the reported coefficient implies that the incidence rate of the dependent variable should be multiplied by the value of that coefficient. Consequently, a coefficient value greater than one reflects a positive effect, while a coefficient value less than one reflects a negative effect.

INSERT TABLES 1a-1d AND TABLE 2 ABOUT HERE

Hypothesis 1 predicted that boomerang employees provide more performance assistance to incumbent former colleagues than true newcomers do. In line with our prediction, we find the IRR of the variable *Assistant is a boomerang* is above one (β=1.127, p-value=.000 in Table 2, Model 1), indicating that the number of assists from boomerangs to incumbent former colleagues is 12.7% higher than the number of assists from true newcomers to incumbent former colleagues.

We predicted in Hypothesis 2 that boomerangs will assist incumbent new colleagues more than true newcomers do. The IRR for our variable *Assistant is a boomerang* is above one (β=1.103, p-value=.000

---

[10] We also run all models using OLS. The results for H1, H2 and H4 are consistent with our main results, but H3 is neither supported nor contradicted. See Appendix A9 in the online appendix.

in Table 2, Model 2), providing correlational evidence for H2. Boomerangs offer 10.3% more performance assistance to incumbent new colleagues than true newcomers do.

We predicted in Hypothesis 3 that incumbent former colleagues provide more performance assistance to boomerangs than to true newcomers. Directly contradicting our expectation, the IRR of *Recipient is a boomerang* is smaller than one (β=0.938, p-value=.013 in Table 2, Model 3), indicating that the number of assists from incumbent former colleagues to boomerangs is 6.2% smaller than the number of assists from incumbent former colleagues to true newcomers.

Hypothesis 4 predicted that incumbent new colleagues provide fewer performance assistance to boomerangs than to true newcomers. We find that the IRR of *Recipient is a boomerang* is below one (β=0.952, p-value=.009 in Table 2, Model 4), suggesting that boomerangs receive fewer assists from incumbent new colleagues than true newcomers do. Specifically, the number of assists from incumbent new colleagues to boomerangs is 4.8% smaller than those to true newcomers.[11]

We also run numerous robustness checks, which we explain in detail in the online appendix.

Exploring the mechanisms

Having provided our main results, we now explore the theorized mechanisms underlying the hypotheses in Tables 3a-3c. First, we argued in H1 that boomerangs provide more performance assistance to incumbent former colleagues because they possess colleague-specific human capital. If colleague-specific human capital is operating, players who played together longer should provide more assists. To test this idea, we split dyads with boomerangs assisting incumbent former colleagues into two groups: those who spent two or more seasons together (*Long relationship*), and those who just played one season together (*Short relationship*). We compared both groups to the omitted variable *Newcomer,* which contains all dyads of true newcomers assisting an incumbent former colleague. Consistent with a colleague specific human capital mechanism, we show in Table 3a, Model 1 that the IRR for dyads of boomerangs and

---

[11] To draw a more complete picture we also explored some of the assisting patterns that are outside of our theory. We discuss this analysis in detail in Appendix A10 in the online appendix.

incumbent former colleagues with a long relationship (β=1.201, p-value=.000) is larger than the IRR for dyads of boomerangs and incumbent former colleagues with a short relationship (β=1.059, p-value=.109). Moreover, the difference between the two IRRs is also statistically significant (p-value=.008).

<center>*** INSERT TABLE 3a ABOUT HERE ***</center>

We also theorized that boomerangs might provide more performance assistance than true newcomers to make up for leaving the team short on skills or other resources after their first stint. To explore this idea, we looked at two types of performance shortfall after the boomerang left the team: a drop in team performance and in player performance. For the first test, we split the dyads in which a boomerang assists an incumbent former colleague into two groups: dyads where the team won more games in the last season with the boomerang compared to the first season without the boomerang (*Performance drop – recipient's team*) and dyads where the team won the same number or fewer games in the last season with the boomerang compared to the first season without the boomerang (*No performance drop – recipient's team*). Again, we compared these two groups of dyads against our omitted category of dyads that consist of true newcomers assisting incumbent former colleagues. As shown in Table 3a, Model 2, both IRRs are above one and significant (β=1.095, p-value=.035 for *Performance drop – recipient's team* and β=1.163, p-value=.000 for *No performance drop – recipient's team*). The IRRs of the two variables are not significantly different from each other (p-value=.142).

In the second test, we split the dyads in which a boomerang assists an incumbent former colleague into two groups: dyads where the incumbent former colleague suffered a drop in PER in the season after the boomerang left the team (*Performance drop – recipient*) and dyads where the incumbent had an equal or higher PER in the season after the boomerang left (*No performance drop – recipient*). We compared these two groups of dyads against our omitted category of dyads that consist of true newcomers assisting incumbent former colleagues. As shown in Table 3a, Model 3, both IRRs are above one and significant (β=1.122, p-value=.037 for the IRR of the variable *Performance drop – recipient*; β=1.133, p-value=.001

for the IRR of the variable *No performance drop - recipient*). The IRRs are very similar in size and, hence, not significantly different (p-value=. 565).

Taken together, while we find support for the theorized colleague-specific human capital mechanism to drive H1, we find no evidence for the suggested motivation mechanism.

For H2, we argued that the primary reason boomerangs assist their incumbent new colleagues more than true newcomers do is their motivation to build relationships and using assists to help create a mentoring relationship or to take on more of a supporting role commensurate with their more advanced career stage. To test this idea, we divided the dyads in which a boomerang assists an incumbent new colleague into two groups: dyads where the boomerang played more seasons in the NBA than the incumbent new colleague (*Boomerang has more NBA experience than the recipient*) and dyads where the boomerang played fewer seasons in the NBA than the receiving incumbent new colleague (*Boomerang has less NBA experience than the recipient*). We compared these two groups of dyads against our omitted category of dyads that consist of true newcomers assisting incumbent new colleagues. As shown in Table 3a, Model 4, the IRR of *Boomerang has more NBA experience than the recipient* is above one and significant (β=1.112, p-value=.000), while the IRR of *Boomerang has less NBA experience than the recipient* is not statistically different from one (β=1.075, p-value=.119). Boomerangs with more NBA experience than the incumbent new colleague provide on average 1.11 times more assists than true newcomers providing some evidence for our suggested mechanism for H2.

Directly contradicting H3, we found that incumbent former colleagues provide fewer performance assists to boomerangs than to true newcomers. To understand this result, we considered how relationship disruption might operate from an incumbent's perspective. Disruptions in the relationship may lead to lingering bad feelings or resentment that manifest in a lower level of help for the boomerang than might be expected, given the dyad's colleague-specific human capital. Though resentment is virtually impossible to measure directly, we can probe this possibility with exploratory analysis, shown in Table 3b. First, incumbent former colleagues who worked longer with a boomerang might have found their

work more disrupted by the boomerang's exit, making them more likely to hold lingering bad feelings that reduce their propensity to assist the boomerang. These feelings might be stronger the longer the boomerang and the incumbent former colleague worked together to develop a working relationship that became obsolete once the boomerang left the team. If resentment is operating, we would expect dyads with longer relationships in the first stint to have less assistance from the incumbent former colleague than shorter relationships. To test this idea, we split the dyads in which incumbent former colleagues assist a boomerang into dyads that worked together for at least two seasons (*Long relationship*) and dyads that worked only for one season together (*Short relationship*). We compared these two groups against the omitted category of dyads with assists from incumbent former colleagues to true newcomers, and show in Table 3b, Model 1 that the dummy capturing assists from incumbent former colleagues to boomerangs who had a longer relationship is below one and significant (β=0.938, p-value=.015), which supports a resentment mechanism. The dummy *Short relationship* is also below one but not significant (β=0.940, p-value=.588).

<center>*** INSERT TABLE 3b ABOUT HERE ***</center>

Next, even if a team's performance drop after the initial exit does not affect a boomerang's assistance behavior, incumbent former colleagues might still have lingering bad feelings. To test this idea, we split the dyads with assists from incumbent former colleagues to boomerangs into two groups: dyads where the team of the incumbent former colleague suffered a performance drop after the boomerang left (*Performance drop – assistant's team*) and dyads where the team of the incumbent colleagues did not experience such a performance drop after the boomerang left (*No performance drop – assistant's team*). We defined a team's performance drop by comparing the number of games won in the last season with the boomerang compared to the first season without the boomerang. We compared these two groups against the omitted category of dyads with assists from incumbent former colleagues to true newcomers. In line with our reasoning and shown in Table 3b, Model 2, we find that the IRR of the variable *Performance drop – assistant's team* is smaller than one (β=0.893, p-value=.001) while the IRR of the

variable *No performance drop – assistant's team* is not statistically different from one (β=0.977, p-value=.495). The difference between the two IRRs is also statistically significant (p-value=.026).

Next, to test whether incumbent former colleagues assist boomerangs less if they personally suffered a performance drop after the boomerang left, we split the dyads with assists from incumbent former colleagues to boomerangs into two groups: dyads where the incumbent former colleague suffered a drop in PER in the season after the boomerang left (*Performance drop – assistant*) and dyads where the incumbent former colleague did not experience a drop in PER in the season after the boomerang left the team (*No performance drop – assistant*). We compared these two groups against the omitted category of dyads with assists from incumbent former colleagues to true newcomers. As shown in Table 3b, Model 3, we find that the IRR of the variable *Performance drop – assistant* is smaller than one (β=0.928, p-value=.067) while the IRR of the variable *No performance drop – assistant* is not statistically different from one (β=0.978, p-value=.538). The IRRs are not statistically different (p-value=.151).

Another source of resentment for incumbent former colleagues could be a status rise experienced by the boomerang after leaving the team, i.e., if the boomerang became an all-star player while away, which might be especially impactful in a star-focused context like the NBA (Brewer 2019). All-stars are selected annually by expert observers, e.g., fans and coaches, to play in an all-star game. Previous studies have used this measure to represent status in the NBA (Ertug and Castellucci 2013). Finding that boomerangs who rose in status after their first stint receive fewer assists from their incumbent former colleagues than those who did not rise in status would be consistent with the idea that resentment is operating. To test this, we split the dyads in which incumbent former colleagues assist a boomerang into two groups: dyads where the boomerangs became an all-star after he left the team (*Boomerang experienced an increase in status*) and dyads where the boomerang either was already an all-star while being with the team for the first time or was not an all-star while on the team or after (*Boomerang did not experience an increase in status*). We compared these two groups of dyads against our omitted category of dyads with incumbent former colleagues assisting true newcomers. Consistent with a resentment mechanism, we show in Table

3b, Model 4 that the IRR for boomerangs who had an increase in status (β=.785, p-value=.008) is smaller than the IRR of boomerang did not have an increase in status (β=.952, p-value=.067), and the difference between the two IRRs is also statistically significant (p-value=.023).

To further explore the idea that incumbent former colleagues might resent boomerangs, we ran a placebo test exploring how incumbent former colleagues react when an injured player returns to the team. Both boomerangs and injured players leave and return to the team, but injured players' absences are unambiguously involuntary. If injured players are treated differently from boomerangs by incumbent former colleagues, i.e., they do not receive fewer assists, this finding would be consistent with a resentment mechanism. We find that incumbent former colleagues give 1.031 times more assists to returning injured players than to true newcomers (β=1.031, p-value=.019 in Table 3b, Model 5), suggesting that absence alone is not enough for incumbents to withhold performance assistance.

Summarizing our exploratory analysis for H3, there is some correlational support for the idea that the unexpected result for H3 is driven by a resentment mechanism that seems to outweigh the positive effects of having colleague-specific human capital between incumbent former colleagues and boomerangs.[12]

We also explored the mechanisms behind H4, the results of which we show in Table 3c. In H4, we argued that incumbent new colleagues might be less motivated to help boomerangs than true newcomers because their role is more ambiguous: neither a true newcomer nor a true insider. If status ambiguity is operating, the negative effect may be smaller when the number of incumbent new colleagues on the court is larger than the number of incumbent former colleagues, because fewer incumbent former colleagues will make a boomerang's prior relationships less salient. To examine this idea, we ran an analysis in which we interacted a new variable *Ratio incumbent new to former colleagues,* which captures the ratio of the sum of incumbent new colleagues divided by the sum of incumbent former colleagues on the field, with *Recipient is a boomerang*. The IRR of the interaction term is statistically not different from one

---

[12] We also explored whether our results for H3 are influenced by how the boomerang left the team and find no significant difference in the assisting behavior towards boomerangs who left via trade and those who left via free agency. See Appendix A11 in the online appendix.

(β=1.017, p-value=.190 in Table 3c, Model 1). As Poisson is a non-linear model and marginal effects are not independent of the explanatory variables, we reran the model using OLS, and again, the interaction term is not significant. Despite the lack of finding, status ambiguity may still operate when incumbent new colleagues view boomerangs. The ratio proxy for status ambiguity reflects the social aspect of status ambiguity, but not status ambiguity that is driven by the boomerang's knowledge of the context, culture, and non-playing staff, which might lead incumbent new colleagues to treat boomerangs differently from true newcomers, regardless of the presence of incumbent former colleagues.

*** INSERT TABLE 3c ABOUT HERE ***

We further theorized in H4 that incumbent new colleagues might provide less performance assistance to boomerangs than to true newcomers because of homophily or identification with the true newcomers. While we cannot test incumbent new colleagues' identity or self-perceptions of similarity, we can test whether homophily plays a role in integration behavior. To do so, we tested whether incumbent new colleagues provide more assistance to true newcomers who are more similar to themselves in terms of draft year and state where they were born. In line with our reasoning, we find that incumbent new colleagues indeed provide more assists to true newcomers who are more similar to themselves on these dimensions (β=1.030, p-value=.032 for the IRR of the variable *Players got drafted in the same year* in Table 3c, Model 2; β=1.049, p-value=.058 for the IRR of the variable *Players are born in the same state* in Table 3c, Model 3). These results are consistent with a homophily mechanism.[13]

Finally, underlying our theory is the idea that performance assistance behaviors are used to integrate boomerangs and true newcomers onto the team. To validate that we are observing integration behaviors, we checked our models against data sets that use data from the second year of re-joining the team. If we are observing integration behavior, our results should disappear. We find that IRRs for our main effects become insignificant in the second year, except for H4, which remains negative and significant.[14]

---

[13] We also investigated whether our results differ if the boomerang was with a rival team while away. The results of this analysis are suggestive of a boomerang's desire to make up to former colleagues for playing for a rival while away. See Appendix A12 in the online appendix.

[14] We show this analysis in Appendix A13 in the online appendix.

DISCUSSION

The importance of relationships to mobility outcomes is well documented (Castilla 2005, Somaya, Williamson, and Lorinkova 2008, Groysberg and Lee 2009, Corredoira and Rosenkopf 2010, Dokko and Rosenkopf 2010, Campbell et al. 2014, Mawdsley and Somaya 2016, Marx and Timmermans 2017, Pieper et al. 2017), but how relationships actually function to integrate new organizational members is less well understood. In this study, we use the phenomenon of boomerang workers to examine the role that relationships play in enabling integration from the perspective of both movers and incumbents. Because boomerangs are already familiar with the organizational context and can have pre-existing relationships on a work team, we can draw contrasts between boomerangs and true newcomers, as well as incumbent former and incumbent new colleagues, to study relational cooperative behavior. Our findings show that boomerangs are generally more helpful to incumbents than true newcomers are, but that incumbent colleagues provide more assistance to true newcomers than to boomerangs. We discuss our findings and their implications in detail in the next section.

Boomerangs give more and receive less

Perhaps the most interesting implication of our findings is the asymmetry between two sides of an existing relationship: boomerang behavior and the behavior of incumbent former colleagues. Most mobility studies focus on the mover's experience without considering the incumbents in the new firm or the co-workers left behind at the old firm. Our study joins a small group of mobility studies that includes incumbents (e.g., Campbell et al. 2014, Chen and Garg 2018, Prato and Ferraro 2018). Using research on newcomers to build theory (Rink et al. 2013), we can take the incumbent's perspective as seriously as the mover, recognizing that mobility's effects in interdependent work settings must involve all parties.

On one side of the relationship, we find that boomerangs provide more performance assistance than true newcomers do. The finding supports our theorizing that re-integrating into an organization's social system involves focusing on relationships: rekindling relationships with former colleagues and building relationships with new colleagues. For example, NBA player Eddie Gill said "*Re-joining the New Jersey Nets has helped me reconnect with guys I've played against and played with...This opportunity is*

invaluable, and I wanted to be a resource for my peers," (Staff 2007). The finding is consistent with other studies that have found that firms benefit from hiring boomerangs (Keller et al. 2021) and contributes a new behavioral mechanism for these effects: boomerangs help others to perform. The finding is also consistent with the idea that pre-existing relationships facilitate performance after a move. Studies of co-mobility have found that moving with colleagues results in higher performance or starting salaries (Campbell et al. 2014, Marx and Timmermans 2017). Studies of referral hiring find that the pre-existing relationship between the referrer and the new hire enables better performance for the referrer and the new hire (e.g., Pieper et al. 2017). Again, our results suggest a behavioral basis for these performance effects: enhanced performance assistance might be a feature of existing relationships, at least for movers.

It is notable that boomerangs' performance assistance appears to be general – allocated towards both incumbent former and incumbent new colleagues. We predicted that boomerangs would also care about building relationships with incumbent new colleagues, a result supported by our analysis, but also anecdotally, with boomerangs like Tyson Chandler saying "*I'm a more mature player, understanding the moment. A lot more confident. First time I came through, I was really trying to establish myself and find my place, but I understand what I bring to my team,*" (Lee 2014) on his return to the Mavericks.

Bringing incumbents into the frame yields a more complex picture. Incumbents recognize a boomerang's familiarity with the context and its benefits for the team. Eric Snow, an incumbent former colleague of Tyrone Hill's said on Hill's return to the Philadelphia 76ers in 2003, "*He came in and helped us defensively and with his rebounding in minimal time on the court with no practice. That's hard to do. We needed him, and I think it'll be easier for him with us than it would have been with Dallas or anywhere else he hadn't been before,*" (Staff 2003). This recognition makes our findings for Hypothesis 3 especially intriguing. Hypothesis 3 relied on theory about colleague-specific human capital and motivation driven by familiarity and personal identification to predict that incumbent former colleagues would provide more assistance to boomerangs than to true newcomers. However, we found that the result was significant in the *opposite* direction than predicted: incumbent former colleagues were *less* likely to assist boomerangs than true newcomers. As we showed in our exploratory analysis, considering

relationship disruption from an incumbent former colleague's perspective led us to speculate that colleagues who were left behind might resent or harbor bad feelings toward the mover.

First, we recognized that if colleague-specific human capital (Campbell et al. 2014) operates in this case, its effect might appear when the dyad has more experience playing together. Indeed, we found a significant negative effect for being a boomerang recipient when the boomerang and incumbent former colleague played together for more than two seasons in the first stint with the team. An alternative explanation for these results is some sort of negative transfer (Singley and Anderson 1989), where increased joint experience makes the incumbent former colleague more confident about understanding the boomerang's skills but not more accurate, leading to failed assists. However, this kind of error should also occur when the boomerang is assisting, and it does not (see Model 1 in Table 2a). Instead, these findings are at least consistent with the suggestion that some resentment might be operating.

Next, we found that incumbent former colleagues provide significantly less performance assistance to boomerangs than to true newcomers when the team or the individual suffered a performance drop in the season after the boomerang first left the team. Turnover is disruptive, requiring the people left behind to rebuild a work process with someone else. For example, Rodney Carney spoke of the effects of Allen Iverson's exit from the Philadelphia 76ers: "*It was a lot of turmoil at the time, especially with Allen Iverson being traded. As soon as he got traded, we were trying to find our identity... There were some up and down years,*" (Frank 2016). We further explored a resentment mechanism by considering instances where the boomerang rose in status while away. We represented status increase with becoming an all-star. The literature on stars suggests that hiring stars tends to suppress incumbents' performance or constrain their opportunities (Kehoe and Tzabbar 2015, Chen and Garg 2018, Prato and Ferraro 2018), which might cause resentment to emerge. The finding that incumbent former colleagues assist boomerangs who became all-stars less than they do true newcomers is especially counterintuitive since players earn an all-star status through performance. The high-stakes context of the NBA and the players' professionalism should make them give more performance assistance to all-stars for the team's benefit, not less.

Generally, the results of our exploratory analysis for H3 are interesting and surprising because of the highly professionalized, high stakes, and highly competitive setting of professional sports. Top athletes care deeply about winning, and systematically disfavoring boomerangs does not seem productive. We can only speculate that resentment is operating as players are unlikely to speak openly about it. However, the general support we find for a resentment mechanism is suggestive, and the effects may be even stronger in settings where employees' incentives to cooperate are less strong or manifestations of resentment are harder to observe. On the other hand, the costs of hiring boomerangs could be lower in contexts where work is more individual in focus, and less cooperation is needed for performance.

Moreover, though resentment is not directly measured, our findings are consistent with prior research showing that psychological factors play a role in behavior, even in professional sports. For example, Willer, Sharkey, and Frey (2012) show that reciprocity operates for assists in NBA games, over and above what would be expected in competitive play; Zhang (2019) shows that racial bias operates in the playing time that NBA coaches give players; and Grohsjean et al. (2016) show that identity and identification with other players and teams affect competitive behavior. Like these other mechanisms, resentment that manifests in play could be non-deliberate and even non-conscious, but we also show that it is transient. Incumbent former colleagues no longer disfavor boomerangs compared to true newcomers after the first season as their re-integration into the team is completed.

Other implications for mobility research

In addition to advancing our understanding of the role of relationships in mobility, our findings also contribute to the emerging literature on boomerangs. Boomerang employees are an important phenomenon for research on employment and mobility, comprising 10-20% of new hires. Individuals are often willing to return to employers (Shipp et al. 2014), and organizations are increasingly willing to rehire them (Keller et al. 2021). A key feature of boomerangs' appeal is their ability to be productive faster than other new hires, i.e., to "hit the ground running." However, studies of boomerangs have yet to examine what they do differently from other new hires when they enter organizations. Our study provides

one concrete way in which boomerangs differ from true newcomers, i.e., performance assistance, which could be a factor in understanding how and when hiring boomerangs is advantageous.

Our findings also have implications for research on the socialization of newcomers. Incoming hires experience formal and informal socialization practices when entering new organizations, which are often designed to socially integrate all newcomers and confer knowledge about the job and organization (Bauer et al. 2007, Fang et al. 2011). These practices can involve job- and organization-specific training and more informal interactions like social events or hallway conversations. In contexts where work is interdependent, and teamwork is critical, like our professional sports team setting, efforts to socialize newcomers can be especially important. For example, LeBron James, a star player of the LA Lakers, organized a mini-camp for team bonding before training camp in 2021 (Charania 2021). Yet our findings suggest that despite focused efforts to socially integrate newcomers, when it matters, i.e., when performance is on the line, there are real differences between boomerangs and true newcomers in terms of performance assistance that could be suboptimal for team performance. This finding may be most applicable in fast-moving contexts like sports, where behavior is often driven by split-second, automatic decision-making (e.g., Willer et al. 2012, Grohsjean et al. 2016). Still, common decision-making can also be affected by implicit, automatic cognition (Milkman, Chugh, and Bazerman 2009). Future research can investigate the socialization of experienced workers (Beyer and Hannah 2002, Beus et al. 2014) and the effects of different practices on their social integration.

Finally, by focusing on boomerangs, our study acknowledges mobility as one event in a long stream of events in a career. Just as people moving from one firm to another carry aspects of their experience with them, they also carry experiences from their more distant pasts. By studying boomerangs, we implicitly recognize the continuity of experience for individuals and their co-workers. Careers are rarely as boundaryless as in popular conception, and boundaries that limit career moves give careers coherence and meaning (Gunz, Peiperl, and Tzabbar 2007). Therefore, working for the same employer more than once or encountering the same people at different points in time may be a normal career pattern. Understanding how a particular experience fits into the course of a whole career could be a fruitful area for study.

Limitations

An obvious limitation of our study is our results' generalizability of due to our context. Sports data have considerable appeal for studies of social interaction in general and job mobility specifically because of the wealth of available data and the ability to observe and measure workers actually doing their jobs. Doing comparable research in more typical organizations would be difficult. Studies of boomerangs that are not situated in sports are in contexts where boomerangs return to different jobs (e.g., Keller et al. 2021) or are about the willingness to return to an employer (Breitsohl and Ruhle 2016) or distinguishing between those who return and those who do not (Shipp et al. 2014) or are qualitative and exploratory (Loan-Clarke et al. 2010). The sports context, in effect, enables us to observe workers interacting while doing their jobs. Moreover, the professionalism of the NBA provides a challenging context in which to test our ideas. If even these highly professional workers show behavioral differences based on relationships, we should undoubtedly expect effects for ordinary workers. However, players' short careers and the relative lack of control they have over their careers leave our study open to generalizability challenges.

First, basketball player careers are relatively short, making boomerang events likely to be more proximate in time than might be observed in other settings. Prolonged absences might have different effects than we see for the relatively short times-to-boomerang in our data. With more time away, there is more time for the boomerang and the organization to change or relationships to decay. Is there a point when boomerangs become just like other new hires? Additional research is needed to explore the effects of time between employment spells for boomerangs. In addition, most boomerangs in the NBA spent their time between employment stints playing for a competitor. For boomerangs more broadly, movement could happen between competitors, complementors, value chain stages, or completely unrelated organizations. Mobility research more broadly has shown that movement between competitors and complementors has different effects and can increase both competitive behavior and cooperation (Somaya et al. 2008, Carnahan and Somaya 2013, Grohsjean et al. 2016, Grohsjean et al. 2024). These differential effects suggest a boundary condition for our findings: moving to non-competitors before boomeranging back might result in differences in helping behavior.

In addition to generalizability concerns, selection could affect our results, as boomeranging and the choice of whom to rehire are not random. Selection effects can occur through selection into the sample (Certo, Busenbark, Woo, and Semadeni 2016) or selection into the treatment (Hill, Johnson, Greco, O'Boyle, and Walter 2021). In our case, selection into the sample is not an issue as we observe all NBA players and their actions rather than a sample. However, selection into the treatment may affect our results as both the boomerang and the rehiring team have additional information about each other from the first stint (Keller et al. 2021). First, boomerangs' knowledge and experience regarding former colleagues, the organization, and the experienced fit may influence their decision to rejoin a team. For example, Ronnie Price said when rejoining the Phoenix Suns, *"I'm back home. Back with all my ex-teammates and coaching staff,"* (Grialou 2017), suggesting a level of comfort with the Suns that he valued. Second, the rehiring team might prefer to rehire players they know are competent and suitable for the existing roster, using their knowledge of the player from the first stint. Overall, these reasons could lead to a selection toward better or better fit players in the treatment and thus to an overestimation of the positive effects of boomeranging in the NBA and underestimation of the negative effects of resentment, i.e., our results for H1 and H2 could be less positive and H3 more negative if our sample also consisted of boomerangs with lower competence and worse fit. However, business organizations also do not hire back boomerangs at random; they also are likely to experience positive selection as both sides use reduced information asymmetry to make a better match. Therefore, the treatment selection could introduce bias, but it is bias in the same direction as would be found in more typical business settings.

Conclusion

We provide evidence that social behaviors can interfere with the smooth transfer of performance from one context to another after job mobility. By studying performance assistance – a crucial pre-cursor to performance – and showing how incoming and incumbent workers behave differently, we highlight the value of considering a wider range of mechanisms for performance and the importance of taking the perspectives of both movers and incumbents. In addition, given the few studies on boomerangs, our study advances our understanding of this interesting and increasingly common phenomenon.

REFERENCES

Abadie A, Athey S, Imbens GW, Wooldridge JM (2023) When should you adjust standard errors for clustering? *Quarterly Journal of Economics* 138(1):1-35.

Adler PS, Kwon S-W (2002) Social capital: Prospects for a new concept. *Academy of Management Review* 27(1):17-40.

Argote L, Aven BL, Kush J (2018) The effects of communication networks and turnover on transactive memory and group performance. *Organization Science* 29(2):191-206.

Arnold JD, Van Iddekinge CH, Campion MC, Bauer TN, Campion MA (2021) Welcome back? Job performance and turnover of boomerang employees compared to internal and external hires. *Journal of Management* 47(8):2198-2225.

Arthur MB (2008) Examining contemporary careers: A call for interdisciplinary inquiry. *Human Relations* 61(2):163-186.

Ashforth BE, Schinoff BS, Rogers KM (2016) "I identify with her," "I identify with him": Unpacking the dynamics of personal identification in organizations. *Academy of Management Review* 41(1):28-60.

Ashforth BE, Sluss DM, Harrison SH (2007) Socialization in organizational contexts. *International Review of Industrial and Organizational Psychology 2007*, 1-70.

Bamberger PA, Levi R (2009) Team-based reward allocation structures and the helping behaviors of outcome-interdependent team members. *Journal of Managerial Psychology* 24(4):300-327.

Bauer TN, Bodner T, Erdogan B, Truxillo DM, Tucker JS (2007) Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. *Journal of Applied Psychology* 92(3):707-721.

Berman SL, Down J, Hill CW (2002) Tacit knowledge as a source of competitive advantage in the National Basketball Association. *Academy of Management Journal* 45(1):13-31.

Beus JM, Whitman DS (2017) Almighty dollar or root of all evil? Testing the effects of money on workplace behavior. *Journal of Management* 43(7):2147-2167.

Beus JM, Jarrett SM, Taylor AB, Wiese CW (2014) Adjusting to new work teams: Testing work experience as a multidimensional resource for newcomers. *Journal of Organizational Behavior* 35(4):489-506 Article.

Beyer JM, Hannah DR (2002) Building on the past: Enacting established personal identities in a new work setting. *Organization Science* 13(6):636-652.

Bidwell MJ, Briscoe F (2010) The dynamics of interorganizational careers. *Organization Science* 21(5):1034-1053.

Borman WC, Motowidlo SJ (1997) Task performance and contextual performance: The meaning for personnel selection research. *Human Performance* 10(2):99-109.

Breitsohl H, Ruhle SA (2016) The end is the beginning - the role of residual affective commitment in former interns' intention to return and word-of-mouth. *European Journal of Work and Organizational Psychology* 25(6):833-848.

Brewer J (2019) Players have assumed power in the NBA without really knowing what they want. *Washington Post.*

Campbell BA, Di Lorenzo F, Tartari V (2021) Employer-employee matching and complementary assets: The role of cross-organization collaborations. *Academy of Management Journal* 64(3):799–823.

Campbell BA, Saxton BM, Banerjee PM (2014) Resetting the shot clock:The effect of comobility on human capital. *Journal of Management* 40(2):531-556.

Carnahan S, Somaya D (2013) Alumni effects and relational advantage: The impact on outsourcing when a buyer hires employees from a supplier's competitors. *Academy of Management Journal* 56(6):1578-1600.

Castilla EJ (2005) Social networks and employee performance in a call center. *American Journal of Sociology* 110(5):1243-1283.

Certo ST, Busenbark JR, Woo H-s, Semadeni M (2016) Sample selection bias and Heckman models in strategic management research. *Strategic Management Journal* 37(13):2639-2657.

Charania S (2021) LeBron James to organize Lakers' 3-day minicamp in Las Vegas: Sources say. *New York Times* https://www.nytimes.com/athletic/4198545/2021/09/21/lebron-james-to-organize-lakers-3-day-minicamp-in-las-vegas-sources/.

Chen JS, Garg P (2018) Dancing with the stars: Benefits of a star employee's temporary absence for organizational performance. *Strategic Management Journal* 39(5):1239-1267.

Cimino A, Delton AW (2010) On the perception of newcomers. *Human Nature* 21(2):186-202.

Coff R, Kryscynski D (2011) Invited editorial: Drilling for micro-foundations of human capital–based competitive advantages. *Journal of Management* 37(5):1429-1443.

Cohen LE (2013) Assembling jobs: A model of how tasks are bundled into and across jobs. *Organization Science* 24(2):432-454.

Corredoira RA, Rosenkopf L (2010) Should Auld Acquaintance Be Forgot? The Reverse Transfer of Knowledge through Mobility Ties. *Strategic Management Journal* 31(2):159-181.

Correia S, Guimarães P, Zylkin T (2020) Fast Poisson estimation with high-dimensional fixed effects. *The Stata Journal* 20(1):95-115.

DeRue DS, Hollenbeck JR, Johnson MD, Ilgen DR, Jundt DK (2008) How different team downsizing approaches influence team-level adaptation and performance. *Academy of Management Journal* 51(1):182-196.

Dokko G, Rosenkopf L (2010) Social capital for hire? Mobility of technical professionals and firm influence in wireless standards committees. *Organization Science* 21(3):677-695.

Ertug G, Castellucci F (2013) Getting what you need: How reputation and status affect team performance, hiring, and salaries in the NBA. *Academy of Management Journal* 56(2):407-431.

Fang RL, Duffy MK, Shaw JD (2011) The organizational socialization process: Review and development of a social capital model. *Journal of Management* 37(1):127-152.

Fonti F, Maoret M (2016) The direct and indirect effects of core and peripheral social capital on organizational performance. *Strategic Management Journal* 37(8):1765-1786.

Frank M (2016) A long road back for ex-76er 1st-round pick Rodney Carney. *Delaware Online* https://www.delawareonline.com/story/sports/nba/76ers/2016/03/31/long-road-76er-rodney-carney/82482850/.

Goldberg JB (2008) Player mobility in professional sports: from the reserve system to free agency. *Sports Lawyers Journal* 15(21):21-57.

Granovetter M (1974) *Getting a job: A study of contacts and careers*, 2nd ed. (University of Chicago Press, Chicago and London).

Greene WH (2008) *Econometric analysis*, 6th ed. (Prentice Hall, Englewood Cliffs, NJ).

Grialou C (2017) Point guard Ronnie Price 'back home' with the Phoenix Suns. *Arizona Sports*, https://arizonasports.com/story/1006151/point-guard-ronnie-price-back-home-phoenix-suns/?show=comments.

Grohsjean T, Kober P, Zucchini L (2016) Coming back to Edmonton: Competing with former employers and colleagues. *Academy of Management Journal* 59(2):394-413.

Grohsjean T, Piezunka H, Mickeler M (2024) When colleagues compete outside the firm. *Strategic Management Journal* (Forthcoming).

Groysberg B, Lee L-E (2009) Hiring stars and their colleagues: Exploration and exploitation in professional service firms. *Organization Science* 20(4):740-758.

Groysberg B, Lee L-E, Nanda A (2008) Can they take it with them? The portability of star knowledge workers' performance. *Management Science* 54(7):1213-1230.

Gunz H, Peiperl M, Tzabbar D (2007) Boundaries in the study of career. *Handbook of career studies*, 471-494.

Haggard DL, Dougherty TW, Turban DB, Wilbanks JE (2011) Who is a mentor? A review of evolving definitions and implications for research. *Journal of Management* 37(1):280-304.

Hill AD, Johnson SG, Greco LM, O'Boyle EH, Walter SL (2021) Endogeneity: A review and agenda for the methodology practice divide affecting micro and macro research. *Journal of Management* 47(1):105-143.

Honoré F (2022) Joining forces: How can founding members' prior experience variety and shared experience increase startup survival? *Academy of Management Journal* 65(1):248-272.

Jia H, Zhong R, Xie X (2021) Helping others makes me fit better: effects of helping behavior by newcomers and coworker-attributed motives on newcomers' adjustment. *Journal of Business & Psychology* 36(3):401-416.

Kane AA, Rink F (2015) How newcomers influence group utilization of their knowledge: Integrating versus differentiating strategies. *Group Dynamics-Theory Research and Practice* 19(2):91-105.

Kehoe RR, Tzabbar D (2015) Lighting the way or stealing the shine? An examination of the duality in star scientists' effects on firm innovative performance. *Strategic Management Journal* 36(5):709-727.

Keller J, Kehoe RR, Bidwell MJ, Collings DG, Myer A (2021) In with the old? Examining when boomerang employees outperform new hires. *Academy of Management Journal* 64(6):1654–1684.

Kilduff GJ, Elfenbein HA, Staw BM (2010) The psychology of rivalry: A relationally dependent analysis of competition. *Academy of Management Journal* 53(5):943–969.

Lawrence BS, Shah NP (2020) Homophily: Measures and meaning. *Academy of Management Annals* 14(2):513-597.

Leard B, Doyle JM (2011) The effect of home advantage, momentum, and fighting on winning in the National Hockey League. *Journal of Sports Economics* 12(5):538-560.

Lee M (2014) Tyson Chandler's reunion with Dallas Mavericks 'showed their appreciation for what I did'. *Washington Post*, https://www.washingtonpost.com/news/sports/wp/2014/10/10/tyson-chandlers-reunion-with-dallas-mavericks-showed-their-appreciation-for-what-i-did/.

Levin DZ, Walter J, Murnighan JK (2011) Dormant ties: The value of reconnecting. *Organization Science* 22(4):923-939.

Li J, Knippenberg Dv (2021) The team causes and consequences of team membership change: A temporal perspective. *Academy of Management Annals* 15(2):577-606.

Loan-Clarke J, Arnold J, Coombs C, Hartley R, Bosley S (2010) Retention, turnover and return - a longitudinal study of allied health professionals in Britain. *Human Resource Management Journal* 20(4):391-406.

Marx M, Timmermans B (2017) Hiring molecules, not atoms: Comobility and wages. *Organization Science* 28(6):1115-1133.

Mawdsley JK, Somaya D (2016) Employee mobility and organizational outcomes: An integrative conceptual framework and research agenda. *Journal of Management* 42(1):85-113.

McDonald ML, Keeves GD, Westphal JD (2018) One step forward, one step back: White male top manager organizational identification and helping behavior toward other executives following the appointment of a female or racial minority CEO. *Academy of Management Journal* 61(2):405-439.

Milkman KL, Chugh D, Bazerman MH (2009) How can decision making be improved? *Perspectives on Psychological Science* 4(4):379-383.

Moreland RL, Levine JM (1982) Socialization in small groups: Temporal changes in individual-group relations. Berkowitz L, ed. *Advances in Experimental Social Psychology*, vol. 15 (Academic Press, New York), 137-192.

Moreland RL, Levine JM (2002) Socialization and trust in work groups. *Group Processes & Intergroup Relations* 5(3):185-201.

Morrison EW (1993a) Longitudinal study of the effects of information seeking on newcomer socialization. *Journal of Applied Psychology* 78:173-183.

Morrison EW (1993b) Newcomer information seeking: Exploring types, modes, sources, and outcomes. *Academy of Management Journal* 36(3):557-589.

Morrison EW (1994) Role definitions and organizational citizenship behavior - the importance of the employees perspective. *Academy of Management Journal* 37(6):1543-1567.

Morrison EW (2002) Newcomers' relationships: The role of social network ties during socialization. *Academy of Management Journal* 45(6):1149-1160.

NBA (2017) Collective Bargaining Agrement 2017. Report.

Organ DW (1988) *Organizational citizenship behavior: The good soldier syndrome* (Lexington Books, Lexington).

Penner LA, Dovidio JF, Piliavin JA, Schroeder DA (2005) Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology* 56:365-392.

Pieper JR, Trevor CO, Weller I, Duchon D (2017) Referral hire presence implications for referrer turnover and job performance. *Journal of Management* 45(5):1858-1888.

Piezunka H, Grohsjean T (2023) Collaborations that hurt firm performance but help employees' careers. *Strategic Management Journal* 44(3):778-811.

Prato M, Ferraro F (2018) Starstruck: How hiring high-status employees affects incumbents' performance. *Organization Science* 29(5):755-774.

Price J, Lefgren L, Tappen H (2013) Interracial workplace cooperation: evidence from the NBA. *Economic Inquiry* 51(1):1026-1034.

Raffiee J, Ganco M, Campbell BA (2020) Better the devil you know? Examining the relationship between spinout team assembly and spinout survival. Tzabbar D, Cirillo B, eds. *Employee Inter- and Intra-Firm Mobility*, vol. 41 (Emerald Publishing Limited), 55-73.

Ray DG, Mackie DM (2009) A commitment approach to understanding group exit: When will an ex-member want to rejoin a former group? *Group Processes & Intergroup Relations* 12(4):479-494.

Rink F, Kane AA, Ellemers N, Van der Vegt G (2013) Team receptivity to newcomers: Five decades of evidence and future research themes. *Academy of Management Annals* 7(1):247-293.

Rollag K (2004) The impact of relative tenure on newcomer socialization dynamics. *Journal of Organizational Behavior* 25(7):853-872.

Shaw JD, Duffy MK, Johnson JL, Lockhart DE (2005) Turnover, social capital losses, and performance. *Academy of Management Journal* 48(4):594-606.

Shipp AJ, Furst-Holloway S, Harris TB, Rosen B (2014) Gone today but here tomorrow: Extending the unfolding model of turnover to consider boomerang employees. *Personnel Psychology* 67(2):421-462.

Singley MK, Anderson JR (1989) *The transfer of cognitive skill* (Harvard University Press, Cambridge, Mass.).

Somaya D, Williamson IO, Lorinkova N (2008) Gone but not lost: The different performance impacts of employee mobility between cooperators versus competitors. *Academy of Management Journal* 51(5):936-953.

Staff (2003) Hill goes back to 76ers. *United Press International* https://www.upi.com/Hill-goes-back-to-76ers/15281046804472/.

Staff (2007) Eddie Gill thriving in career after basketball with Wells Fargo. *Legends of Basketball*, https://www.legendsofbasketball.com/eddie-gill-thriving-in-career-after-basketball-with-wells-fargo/.

Staw BM, Hoang H (1995) Sunk costs in the NBA: Why draft order affects playing time and survival in professional basketball. *Administrative Science Quarterly* 40(3):474-494.

Stein M. (2017) The 2016-17 NBA all-no-trade team. *ESPN*, Accessed 31/01/2022, 2022, http://www.espn.com/blog/marc-stein/post/_/id/4937/the-2016-17-nba-all-no-trade-team.

Summers JK, Humphrey SE, Ferris GR (2012) Team member change, flux in coordination, and performance: Effects of strategic core roles, information transfer, and cognitive ability. *Academy of Management Journal* 55(2):314-338.

Swider BW, Liu JT, Harris TB, Gardner RG (2017) Employees on the rebound: Extending the careers literature to include boomerang employment. *Journal of Applied Psychology* 102(6):890-909.

Willer R, Sharkey A, Frey S (2012) Reciprocity on the hardwood: Passing patterns among professional basketball players. *PloS one* 7(12):e49807.

Zhang L (2019) Who loses when a team wins? Better performance increases racial bias. *Organization Science* 30(1):40-50.

Table 1a. Descriptive statistics and bivariate correlations for the sample testing Hypothesis 1 (N = 47,272)

		Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10
1	Number of assists	0.35	0.72	0.00	9.00	1.000									
2	Assistant is a boomerang	0.36	0.48	0.00	1.00	0.003	1.000								
3	Assistant's NBA experience	7.55	3.87	2.00	20.00	0.041	0.181	1.000							
4	Assistant's in-season performance	-0.31	0.82	-1.97	3.20	0.142	-0.190	-0.013	1.000						
5	Assistant is a free agent	0.66	0.47	0.00	1.00	-0.052	0.166	0.032	-0.148	1.000					
6	Recipient's NBA experience	7.11	3.67	2.00	21.00	0.008	0.004	0.081	0.031	0.025	1.000				
7	Recipient's in-season performance	0.44	1.08	-1.94	3.38	0.122	-0.021	0.035	-0.016	-0.010	0.095	1.000			
8	Recipient is a free agent	0.86	0.35	0.00	1.00	0.002	-0.014	0.054	-0.001	-0.026	0.035	0.072	1.000		
9	Dyad's joint experience in other teams	1.65	13.75	0.00	262.00	-0.002	0.022	0.096	0.014	0.023	0.104	-0.036	-0.046	1.000	
10	Team's recent performance	5.06	2.11	0.00	10.00	-0.025	0.001	0.126	0.073	0.045	0.134	0.137	0.026	0.039	1.000
11	Team plays at home	0.50	0.50	0.00	1.00	0.013	0.002	0.005	0.018	-0.001	0.003	0.003	0.004	-0.003	0.042

Table 1b. Descriptive statistics and bivariate correlations for the sample testing Hypothesis 2 (N = 95,173)

		Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10
1	Number of assists	0.32	0.70	0.00	9.00	1.000									
2	Assistant is a boomerang	0.36	0.48	0.00	1.00	0.017	1.000								
3	Assistant's NBA experience	8.59	3.91	2.00	20.00	0.015	0.332	1.000							
4	Assistant's in-season performance	-0.30	0.91	-1.97	3.31	0.164	-0.169	-0.104	1.000						
5	Assistant is a free agent	0.62	0.49	0.00	1.00	-0.050	0.063	-0.033	-0.128	1.000					
6	Recipient's NBA experience	5.87	3.55	2.00	19.00	0.009	0.007	0.056	0.047	0.032	1.000				
7	Recipient's in-season performance	0.23	1.00	-1.94	3.30	0.107	-0.010	0.029	-0.002	-0.007	0.054	1.000			
8	Recipient is a free agent	0.72	0.45	0.00	1.00	-0.010	0.003	0.034	0.012	-0.016	-0.052	-0.006	1.000		
9	Dyad's joint experience in other teams	3.76	23.22	0.00	507.00	0.001	-0.002	0.098	-0.013	-0.015	0.186	0.014	-0.011	1.000	
10	Team's recent performance	5.14	2.11	0.00	10.00	-0.013	0.002	0.118	0.080	0.043	0.145	0.136	0.034	0.029	1.000
11	Team plays at home	0.51	0.50	0.00	1.00	0.012	-0.001	0.000	0.002	-0.002	-0.002	0.002	0.008	-0.001	0.049

Table 1c. Descriptive statistics and bivariate correlations for the sample testing Hypothesis 3 (N = 47,440)

		Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10
1	Number of assists	0.34	0.68	0.00	8.00	1.00									
2	Recipient is a boomerang	0.36	0.48	0.00	1.00	-0.05	1.00								
3	Assistant's NBA experience	7.16	3.66	2.00	21.00	0.02	0.01	1.00							
4	Assistant's in-season performance	0.44	1.08	-1.94	3.38	0.13	-0.02	0.10	1.00						
5	Assistant is a free agent	0.86	0.35	0.00	1.00	0.04	-0.02	0.05	0.08	1.00					
6	Recipient's NBA experience	7.55	3.87	2.00	19.00	0.02	0.18	0.07	0.03	0.05	1.00				
7	Recipient's in-season performance	-0.32	0.82	-1.97	3.20	0.14	-0.20	0.02	-0.02	0.00	-0.02	1.00			
8	Recipient is a free agent	0.66	0.47	0.00	1.00	-0.08	0.17	0.02	-0.01	-0.02	0.04	-0.15	1.00		
9	Dyad's joint experience in other teams	1.62	13.61	0.00	262.00	0.00	0.02	0.10	-0.04	-0.05	0.09	0.01	0.03	1.00	
10	Team's recent performance	5.12	2.09	0.00	10.00	0.02	0.00	0.12	0.14	0.04	0.12	0.06	0.05	0.03	1.00
11	Team plays at home	0.50	0.50	0.00	1.00	0.01	0.00	0.00	0.01	0.01	0.00	0.02	0.00	-0.01	0.03

Table 1d. Descriptive statistics and bivariate correlations for the sample testing Hypothesis 4 (N = 95,134)

		Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10
1	Number of assists	0.28	0.62	0.00	9.00	1.00									
2	Recipient is a boomerang	0.37	0.48	0.00	1.00	-0.04	1.00								
3	Assistant's NBA experience	5.90	3.54	2.00	19.00	0.01	0.01	1.00							
4	Assistant's in-season performance	0.23	1.01	-1.94	3.30	0.13	-0.01	0.05	1.00						
5	Assistant is a free agent	0.73	0.45	0.00	1.00	-0.01	0.00	-0.05	-0.02	1.00					
6	Recipient's NBA experience	8.61	3.92	2.00	20.00	-0.02	0.34	0.05	0.03	0.03	1.00				
7	Recipient's in-season performance	-0.31	0.91	-1.97	3.31	0.13	-0.17	0.04	0.00	0.02	-0.10	1.00			
8	Recipient is a free agent	0.62	0.49	0.00	1.00	-0.05	0.06	0.03	-0.01	-0.02	-0.03	-0.13	1.00		
9	Dyad's joint experience in other teams	3.76	23.09	0.00	410.00	0.00	0.00	0.18	0.01	-0.01	0.10	-0.01	-0.02	1.00	
10	Team's recent performance	5.15	2.10	0.00	10.00	0.00	0.00	0.15	0.13	0.03	0.11	0.08	0.05	0.03	1.00
11	Team plays at home	0.50	0.50	0.00	1.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.04

Table 2. Main results of Poisson regressions on the number of assists

	Model 1	Model 2	Model 3	Model 4
	H1	H2	H3	H4
H1/H2: Assistant is a boomerang	1.127***	1.103***		
	[0.000]	[0.000]		
H3/H4: Recipient is a boomerang			0.938**	0.952***
			[0.013]	[0.009]
Assistant's NBA experience	1.008**	1.025***	0.860	0.977
	[0.041]	[0.000]	[0.769]	[0.885]
Assistant's in-season performance	1.272***	1.287***	1.052	1.070**
	[0.000]	[0.000]	[0.324]	[0.032]
Assistant is a free agent	0.924**	0.933***	0.851	0.988
	[0.014]	[0.008]	[0.200]	[0.786]
Recipient's NBA experience	0.703	0.681***	0.994	0.994**
	[0.346]	[0.008]	[0.115]	[0.013]
Recipient's in-season performance	1.111**	1.170***	1.159***	1.154***
	[0.033]	[0.000]	[0.000]	[0.000]
Recipient is a free agent	0.878	0.953	1.009	1.042**
	[0.213]	[0.317]	[0.758]	[0.032]
Dyad's joint experience in other teams	0.999	0.999	1.001	1.001
	[0.380]	[0.252]	[0.269]	[0.213]
Team's recent performance	1.013	0.972**	1.033	0.975**
	[0.498]	[0.026]	[0.106]	[0.039]
Team plays at home	1.060	1.165***	1.119**	1.122***
	[0.220]	[0.000]	[0.021]	[0.000]
Constant	0.415	0.284	0.100	0.039***
	[0.746]	[0.143]	[0.543]	[0.001]
Fixed effects				
Assistant	No	No	Yes	Yes
Recipient	Yes	Yes	No	No
Assistant's position	Yes	Yes	No	No
Recipient's position	No	No	Yes	Yes
Game	Yes	Yes	Yes	Yes
Assistant	Boomerang Newcomer	Boomerang Newcomer	Incumbent former colleagues	Incumbent new colleagues
Recipient	Incumbent former colleagues	Incumbent new colleagues	Boomerang Newcomer	Boomerang Newcomer
Observations	47,272	95,173	47,440	95,134
Log pseudolikelihood	-27363	-52325	-27097	-49171

Notes. All models show Poisson regressions with standard errors clustered at the dyad level and *dyad's in-game minutes* specified as exposure parameter. The reported coefficients are incidence-rate ratios, which reflect the exponential of the coefficients of the Poisson models. Exact p-values are shown in brackets below the estimates.

*p < .10; **p < .05; ***p < .01.

Table 3a. Exploring the mechanisms driving H1 and H2

	Model 1	Model 2	Model 3	Model 4
		H1		H2
Short relationship	1.059			
	[0.109]			
Long relationship	1.201***			
	[0.000]			
Performance drop - recipient's team		1.095**		
		[0.035]		
No performance drop - recipient's team		1.163***		
		[0.000]		
Performance drop - recipient			1.122**	
			[0.037]	
No performance drop - recipient			1.133***	
			[0.001]	
Boomerang has more NBA experience than the recipient				1.112***
				[0.000]
Boomerang has less NBA experience than the recipient				1.075
				[0.119]
Controls	Yes	Yes	Yes	Yes
Fixed effects				
Assistant	No	No	No	No
Recipient	Yes	Yes	Yes	Yes
Assistant's position	Yes	Yes	Yes	Yes
Recipient's position	No	No	No	No
Game	Yes	Yes	Yes	Yes
Assistant	Boomerang Newcomer	Boomerang Newcomer	Boomerang Newcomer	Boomerang Newcomer
Recipient	Incumbent former colleagues	Incumbent former colleagues	Incumbent former colleagues	Incumbent new colleagues
Observations	47,272	47,272	47,272	95,173
Log pseudolikelihood	-27358	-27362	-24791	-52324

Notes. All models show Poisson regressions with standard errors clustered at the dyad level and *dyad's in- game minutes* specified as exposure parameter. The reported coefficients are incidence-rate ratios, which reflect the exponential of the coefficients of the Poisson models. Exact p-values are shown in brackets below the estimates.
*p < .10; **p < .05; ***p < .01.

Table 3b. Exploring the mechanisms driving H3

	Model 1	Model 2	Model 3	Model 4	Model 5
			H3		
Short relationship	0.940				
	[0.588]				
Long relationship	0.938**				
	[0.015]				
Performance drop - assistant's team		0.893***			
		[0.001]			
Performance drop - assistant's team		0.977			
		[0.495]			
Performance drop - assistant			0.928*		
			[0.067]		
Performance drop - assistant			0.978		
			[0.538]		
Boomerang experienced an increase in status				0.785***	
				[0.008]	
Boomerang did not experience an increase in status				0.952*	
				[0.067]	
Recipient is a returning injured player					1.031**
					[0.019]
Controls	Yes	Yes	Yes	Yes	Yes
Fixed effects					
Assistant	Yes	Yes	Yes	Yes	Yes
Recipient	No	No	No	No	No
Assistant's position	No	No	No	No	No
Recipient's position	Yes	Yes	Yes	Yes	Yes
Game	Yes	Yes	Yes	Yes	Yes
Assistant	Incumbent former colleagues	Incumbent former colleagues	Incumbent former colleagues	Incumbent former colleagues	Incumbent former colleagues
Recipient	Boomerang Newcomer	Boomerang Newcomer	Boomerang Newcomer	Boomerang Newcomer	Injured player Newcomer
Observations	47,440	47,440	47,440	47,440	566,901
Log pseudolikelihood	-27097	-27094	-27094	-27094	-292671

Notes. All models show Poisson regressions with standard errors clustered at the dyad level and *dyad's in- game minutes* specified as exposure parameter. The reported coefficients are incidence-rate ratios, which reflect the exponential of the coefficients of the Poisson models. Exact p-values are shown in brackets below the estimates.
*p < .10; **p < .05; ***p < .01.

Table 3c. Exploring the mechanisms driving H4

	Model 1	Model 2	Model 3
		H4	
Recipient is a boomerang	0.929*		
	[0.067]		
Ratio incumbent new to former colleagues	0.987		
	[0.667]		
Recipient is a boomerang x Ratio incumbent new to former colleagues	1.017		
	[0.190]		
Players got drafted in the same year		1.033**	
		[0.032]	
Players are born in the same state			1.049*
			[0.058]
Controls	Yes	Yes	Yes
Fixed effects			
Assistant	Yes	Yes	Yes
Recipient	No	Yes	Yes
Assistant's position	No	No	No
Recipient's position	Yes	No	No
Game	Yes	Yes	Yes
Assistant	Incumbent new colleagues	Incumbent new colleagues	Incumbent new colleagues
Recipient	Boomerang Newcomer	Newcomer	Newcomer
Observations	48,567	532,109	699,225
Log pseudolikelihood	-25083	-268002	-377339

Notes. All models show Poisson regressions with standard errors clustered at the dyad level and *dyad's in- game minutes* specified as exposure parameter. The reported coefficients are incidence-rate ratios, which reflect the exponential of the coefficients of the Poisson models. Exact p-values are shown in brackets below the estimates.

*p < .10; **p < .05; ***p < .01