

Let's Call a Star a Star: Task Performance, External Status, and Exceptional Contributors in Organizations

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**LET'S CALL A STAR A STAR: TASK PERFORMANCE, EXTERNAL STATUS, AND
EXCEPTIONAL CONTRIBUTORS IN ORGANIZATIONS**

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ABSTRACT

We develop a new typology of star employees, wherein we identify three types of stars – universal stars, performance stars, and status stars – on the basis of stars' unique combinations of task performance and external status. By classifying stars in this way and disentangling task performance and external status as unique and simultaneously important qualities underlying the distinct contributions of different types of stars, we provide a basis for more accurately identifying the full range of individuals who create exceptional value, and offer novel insights into stars' various influences in organizations. With this foundation, we explore how different types of stars' distinct qualities and bases of value creation affect both the security of their star standing and their relative abilities to appropriate value. We then expand our focus to consider stars in the broader organizational contexts in which they exist, discussing the implications of stars' distinct attributes for patterns of value creation, value capture, and value preservation associated with stars' complementarities and redundancies with other organizational resources. Finally, we propose several lines of inquiry through which future research may leverage the proposed typology to address issues related to the management of different types of stars in the broader organizational contexts in which they are embedded.

Keywords: stars, strategic human capital, status, task performance

LET'S CALL A STAR A STAR: TASK PERFORMANCE, EXTERNAL STATUS, AND EXCEPTIONAL CONTRIBUTORS IN ORGANIZATIONS

A growing body of research delineates a variety of benefits that star employees may bring to organizations. In addition to making disproportionately large contributions to firm productivity through exceptional task performance (Groysberg, Polzer & Elfenbein, 2011; Zucker & Darby, 1997), stars may provide knowledge spillovers and developmental support to colleagues (Kehoe & Tzabbar, 2015; Oettl, 2012), as well as visibility outside the organization which attracts customers (Groysberg & Lee, 2010; Lucifora & Simmons, 2003), knowledge (Zucker, Darby, & Torero, 2002), tangible resources (Liebeskind, Oliver, Zucker, & Brewer, 1996), and opportunities (Hess & Rothaermel, 2011) from the external environment.

The most broadly accepted definition identifies stars as individuals who demonstrate exceptionally high productivity and enjoy broad external visibility (Groysberg, Lee, & Nanda, 2008; Oldroyd & Morris, 2012). While providing a useful foundation for understanding many of the influences stars exert in organizations, this definition suffers two limitations that restrict our understanding of star contributors and fails to account for key distinctions in the qualities, contributions, and challenges that different types of stars bring to organizations. First, this definition recognizes stars only at a specific “peak” stage in their careers – i.e., when their task performance and external visibility are both exceptionally high. This approach fails to consider the variability in task performance and visibility that stars may experience over the course of their careers and limits research on stars to only a portion of these individuals in a work context at a given time (Tzabbar & Kehoe, 2014). Second, by classifying only individuals demonstrating both exceptional task performance *and* broad external visibility as stars, this conceptualization paints an incomplete picture of how employees – and stars in particular – create value.

To address these issues, we propose a typology that identifies three broad categories of stars – universal stars, performance stars, and status stars – who each make unique exceptional contributions to organizations based on their various levels and sources of individual task performance and external status. After developing the typology and delineating the specific forms of exceptional direct (e.g., through individual task performance) and indirect (e.g., through the conveyance of knowledge spillovers and access to external resources) contributions (Grigoriou & Rothaermel, 2014) which may be made by each type of star, we explore how different types of stars' distinct qualities affect both the security of their star standing and their relative abilities to appropriate value. We then consider stars in the broader organizational contexts in which they are employed, discussing implications of our typology for stars' interactions with other organizational resources for the creation, appropriation, and preservation of value. Finally, we propose several lines of inquiry through which future research may leverage the proposed typology to address issues related to the management of different types of stars both as individuals and in the broader organizational contexts in which they are embedded.

TASK PERFORMANCE AND STATUS AS SOURCES OF VALUE CREATION

To better understand the dynamics and qualities underlying stardom, we begin by exploring the key attributes underlying stars' excellence—task performance and status.

Task Performance

Task performance refers to an individual's effectiveness in completing his or her core job- or role-based responsibilities (Conway, 1999; Motowidlo & Van Scotter, 1994). Task performance is central to the classification of stars for two reasons. First, a focus on task performance is consistent with approaches used to classify stars in prior research – where performance criteria for stardom are based on assessments of task performance as specifically

defined in the relevant research context (O'Boyle & Aguinis, 2012) (e.g., patenting applications and cites in biotechnology firms (Zucker & Darby, 1997), publications in academia (Oetl, 2012)). Second, because task performance contributes more directly to an organization's core objectives than other types of performance (e.g., contextual performance, Motowidlo, Borman, & Schmit (1997)) and reflects an employee's effectiveness in fulfilling his or her assigned role within an organization, task performance provides the most universally valued (and thus generalizable) measure of employees' direct contributions to firm performance.

Status

Status can be viewed as the amount of respect, influence, and admiration an individual enjoys in the eyes of others (Anderson, John, Keltner, & Kring, 2001; Magee & Galinsky, 2008). Status is a function of the relevant social hierarchy, and status assessments tend to be subjective – but highly agreed upon – among a particular group (Anderson, Srivastava, Beer, Spataro, & Chatman, 2006; Magee & Galinsky, 2008). Status tends to be self-reinforcing (Bunderson, 2003), but may be influenced through changes in a group's subjective evaluations of an individual over time – which may result from an individual's accomplishments, perceived competence, or demonstrated relevance to a group's priorities (Magee & Galinsky, 2008).

Focusing on external *status* represents a divergence from the broadly accepted focus on individuals' *visibility* as a criterion for star standing. By recognizing only individuals with broad external visibility of their exceptional task performance as stars, prior research assumes that a) individuals may only create exceptional value through their task performance when it is broadly recognized outside their organizations; and b) visibility of exceptional task performance is the only means through which individuals may attain the broad status outside of their organizations. In comparison, by focusing on external *status* which is broader than the visibility of an

individual's task performance, we acknowledge the important role that status may play in an individual's contributions to an organization, either with or without outstanding task performance. Focusing on status allows for the possibility that an individual may attain external status as the result of attributes independent of the level or visibility of his or her current task performance. Indeed, researchers have argued that external status may be realized as a result of skillful networking (Thye, 2000); may be more affiliation-based, such as when an individual enjoys broad attention resulting from a close affiliation with an elite person or institution (Merton, 1968) or sponsorship by a manager or mentor (Allen, Eby, Poteet, Lentz, & Lima, 2004); or may be a carryover from status gained through highly visible exceptional performance in a prior period (Flynn & Amanatullah, 2012; Merton, 1968).

Importantly, while individuals may demonstrate internal status within organizations, for status to be considered the source of an individual's *exceptional* value creation, we assume this status must be held externally. This perspective is consistent with evidence from prior research that demonstrates that stars' key status-based contributions take the form of preferential access to resources, opportunities, and general favor in the organization's external environment.

Unpacking the Relationship between Task Performance and Status

From a value creation perspective, task performance and status are not necessarily tightly intertwined, nor characteristic of all individuals who make extraordinary contributions in organizations. This does not mean that they are not related. Rather, scholars have demonstrated a variety of temporal patterns which commonly emerge between these qualities that are relevant to understanding the patterns of their existence in individuals.

Task performance as a predictor of status. The simplest relationship between task performance and status occurs when task performance is visible and the characteristics of strong

performance are well defined, and status naturally follows from exceptional task performance (Magee & Galinsky, 2008). Consistent with the tenets of status characteristics theory (Berger, Cohen, & Zelditch, 1972), an individual's work status may be rooted in the personal characteristics that reflect task competence (Berger & Zelditch, 1985), which may include prior exceptional task performance (Magee & Galinsky, 2008). Groysberg and Lee (2008) highlight such a relationship in the context of status attained based on clients' rankings of investment analysts' research quality.

Status as a predictor of task performance. While status may flow from exceptional task performance, an individual's status may also positively influence his or her task performance. Higher task performance of high status actors may be fueled by their preferential access to resources (Chen, Peterson, Phillips, Podolny, & Ridgeway, 2012) and reduced barriers and costs in exchange (Podolny, 2005) as well as by improved social support that fosters legitimacy and self-efficacy, which provide the emotional foundation for success (Shea & Howell, 2000; Sparrowe, Liden, Wayne, & Kraimer, 2001). Status also shapes others' subjective evaluations of an individual's performance (Blau, 1964) through its positive effects on others' expectations (Bothner, Kim, & Smith, 2012; Merton, 1968) and attributions (Judge, Kammeyer-Mueller, & Bretz, 2004; Merton, 1973) of task performance associated with high status actors.

Interdependence and reciprocity in task performance and status. Research on accumulated advantage (Merton, 1968) points to a self-perpetuating cycle where high status, top performing actors enjoy preferential access to tangible and intangible resources, opportunities, and support, which contribute to their continued superior performance and status (Judge et al., 2004; Miller, Glick, & Cardinal, 2005; Sutton & Hargadon, 1996). Others have suggested a curvilinear relationship between task performance and status, wherein status confers resource-

based benefits which support increased task performance up to a certain level of status, after which further increases in status are thought to contribute to attitudinal and behavioral tendencies (e.g., complacency, decreased effort, excessive focus on rent seeking) which may ultimately harm an individual's subsequent task performance (Bothner et al., 2012; Weber, 1978).

As these research findings suggest, the relationship between task performance and status may vary across individuals and over time. Differences in this relationship may emerge due to variance in the inherent visibility of performance in different jobs, the nature of performance evaluation in different contexts, the logic underlying resource allocation decisions, or psychological differences across individuals. Moreover, unpredictable lags in the effects of changes in an individual's task performance or status on these factors suggest that it may be difficult to predict the relationship between task performance and status that will materialize for a specific individual at a particular point in time. Given these possibilities, the proposed typology classifies stars based on a snapshot of individuals' current task performance and status, with consideration of how prior achievements affect individuals' current star standing.

BEHIND THE EXCELLENCE: A TYPOLOGY OF STARS AND VALUE CREATION

Prior to introducing the proposed typology, it is important to lay out a few assumptions on which the typology rests. First, exceptional contributions made on the basis of either task performance or external status – or both of these attributes – may serve as the primary basis for an individual's designation as a star. However, to achieve and sustain star standing based on exceptional task performance, we suggest an individual must acquire at least a moderate level of status within the organization to allow the individual access to resources, colleagues' support, and incentives which facilitate continued exceptional task-based contributions (Bothner et al., 2012). Likewise, individuals whose stardom is rooted in broad external status are unlikely to be

fully appreciated within an organization – and may even fail to maintain their employment – if they fail to fulfill the basic requirements of their jobs by meeting minimal task performance expectations. Second, and related, while we assume that external status in an industry is likely to represent prestigious standing in a broader social hierarchy relative to status within an organization, such that stars' broad external status is likely to encompass their internal status (Groysberg et al., 2011), we recognize there may be exceptions to this rule. We address these exceptions in the discussion rather than within the typology.

Table 1 presents a typology of stars which categorizes individuals according to the bases of their stardom and their potential sources of exceptional value creation. We identify three broad categories of stars – universal stars, performance stars, and status stars – as well as three subcategories of status stars who vary on the sources of their external status. We highlight three broad forms of value creation associated with stars: exceptional task performance, access to external resources, and influences on colleagues. Within these three forms of contribution, different types of stars vary with respect to the specific mechanisms through which they may create exceptional value. We argue that these distinct bases of value creation have important implications not only for stars' individual contributions in organizations, but also for the security of their star standing, their appropriation of value and their responses to complementarities and redundancies that emerge as they interact with other organizational resources.

--- Insert Table 1 here ---

Universal Stars

We begin with a discussion of universal stars for two reasons. First, universal stars are individuals who demonstrate exceptional task performance *and* broad external status, which fits most closely with the characterization of stars adopted in prior research and thus allows us to

draw closely from the extant star literature in discussing their value creation potential. Second, because universal stars demonstrate exceptional levels of *both* task performance and status, the contributions of all other stars are subsets of the contributions of universal stars that we outline here (with networking stars representing a potential exception which we discuss later).

Universal stars are most often recognized for contributing to organizations through their exceptional *task performance* which distinguishes the scope and impact of their contributions from those of other employees. In scientific fields, stars' task performance is often assessed based on the quantity and impact of their publications and patents (Rothaermel & Hess, 2007; Zucker & Darby, 1997). Elsewhere, stars' task performance has been assessed through other context-relevant criteria, such as client rankings in the context of investment analysts (Groysberg et al., 2008), or goals and assists made in professional soccer (Lucifora & Simmons, 2003), with metrics reflecting outcomes closely related to organizations' operational performance goals.

The external status achieved by universal stars may provide them with preferential access to catalysts for future task performance-based contributions, including opportunities, resources, and collaborators in the pursuit of subsequent performance goals (Beck, Beatty, & Sackett, 2014; Hess & Rothaermel, 2011). The resulting cumulative advantage, emerging from these stars' prior outstanding task performance and current external status, positions these individuals for continued success of different forms (Cole & Cole, 1973; Oldroyd & Morris, 2012). In addition to paving the way for ongoing exceptional task performance, the combination of universal stars' expertise, proven performance, and external status positions them to make significant indirect contributions (i.e., independent of their individual task performance) to value creation.

One type of indirect contribution through which universal stars are often well positioned to create value is by providing their organizations *access to external resources*, which may come

in the form of attraction of customers or investors; timely and privileged access to information, knowledge, and opportunities; or preferred access to exchange partners.

First, when a universal star's status leads to a positive reputation among potential customers, the reputational spillover from the star to the organizations may cause customers to be more attracted to the organization's products or services. Groysberg and Lee (2010) highlight such benefits to the broader organization from investment analysts appearing in industry-wide publications based on client rankings of their performance. Similarly, Ravid (1999) noted higher revenues earned by films employing star actors, and Lucifora and Simmons (2003) highlighted customers' willingness to pay more for sporting event tickets involving star athletes – with both effects stemming from signaling of quality associated with the products or services with which a star is involved. Extending this logic to the context of investors and firm valuation, Higgins, Stephan, and Thursby (2011) found that technology firms employing Nobel laureate scientists realized greater IPO proceeds than firms without such highly acclaimed employees.

Second, universal stars' status often provides them preferential access to relevant knowledge and tangible resources (Liebeskind, Oliver, Zucker, & Brewer, 1996) in the external environment, which may be made available by the high-visibility professional roles they frequently attain (Hess & Rothaermel, 2011). This status might also afford such stars control over opportunities (e.g., in their roles as gatekeepers) which support innovation and success in an industry (Rothaermel & Hess, 2007). To the extent that universal stars share this knowledge and these resources throughout their organizations and leverage their control over opportunities to benefit colleagues' work, these spillovers may serve as a method for increasing total value creation in the organization (Kehoe & Tzabbar, 2015).

Third, universal stars tend to be viewed as desirable social exchange partners by actors in

the professional community (Zucker & Darby, 1997). These partnerships may be formed at the interpersonal level or on behalf of a star's organization, and can provide valuable connections to talented external actors eager to contribute their own expertise and efforts to projects involving the star (Zucker, Darby, & Armstrong, 2002). These individuals may even seek to join the star's organization to work more closely with the star (Coff & Kryscynski, 2011; Groysberg & Lee, 2009). In these scenarios, universal stars may indirectly contribute to value creation by connecting external partners to colleagues in the star's organization, or as a recruiting aid in attracting talent to the firm's workforce (Coff & Kryscynski, 2011).

Universal stars may also contribute to value creation through their *influence on colleagues*. Their expert power (French & Raven, 1959) tends to place them at the center of workflows (Paruchuri, 2010) and in control of key resources (Zucker & Darby, 1997), providing them the opportunity and power to influence the day-to-day conduct of work (e.g., by shaping work norms) and serve as role models to others (Huckman & Pisano, 2006). Indeed, employees in organizations employing a universal star are more likely to adopt behavioral norms associated with effective work outcomes which are exemplified by stars (Lacetera, Cockburn, & Henderson, 2004). For example, Burke, Fournier, and Prasad (2007) found that surgeons were more likely to adopt progressive medical technologies when working in the presence of star surgeons, who were the most apt adopters of such technologies themselves. Universal stars' more direct interactions with colleagues in the forms of formal collaboration (Azoulay, Zivin, & Wang, 2010; Kehoe & Tzabbar, 2015), mentoring (Noe, 1988), sponsorship (Allen et al., 2004), and helping (Furukawa & Goto, 2006; Oettl, 2012) provide further opportunities for the performance of other employees to benefit from their knowledge.

Performance Stars

Performance stars demonstrate exceptional task performance and enjoy status within – but not outside – their organization. As a result, performance stars would not be identified as stars using the definition often employed in prior research. There are three potential explanations for an individual's standing as a performance star. First, the individual may work in a job or industry where task performance is inherently less visible outside the organization. For example, an associate at a law firm who excels in her lower-visibility non-litigator role may be recognized for her exceptional task performance internally but is less likely to achieve the broad external status enjoyed by an associate in a more outward-facing litigator role (Larkin & Huang, 2014).

Second, a performance star could be a “rising star” – an individual who is earlier in his or her tenure within an industry but who has begun to demonstrate exceptional task performance and has thus been afforded status within, but not yet outside, the organization (Tzabbar & Kehoe, 2014). Returning to the litigator in the example above, even with the start of an exceptional case record which brings her recognition within her employing law firm, it may take several years for external actors or firms to recognize her outstanding cumulative performance (Larkin & Huang, 2014). This scenario reflects an important point about the link between task performance and status: While it is possible in some industries (e.g., film) for individuals to achieve universal star status with a single breakthrough performance (Ravid, 1999), more often, broad recognition accrues to individuals as a result of *cumulative* outstanding performance over time (Oldroyd & Morris, 2012). This reflects that classification as a performance star represents a temporal stage for some stars who are on a trajectory toward universal stardom but have not yet attained the status, bargaining power, or legitimate threat of exit that universal stars possess.

A third path to performance star standing is through a “fall from grace” from universal star standing. In this case, an individual, once a universal star, could conceivably lose their

external star standing in the professional community due to an action, event, or change that is unrelated to the individual's still-exceptional task performance. For instance, this could occur due to an individual's failure to maintain external relations or participating in visible professional roles that reinforce the status which might otherwise accompany such stars' task performance.

With respect to value creation, performance stars make extraordinary contributions to organizations largely through their exceptional *task performance*. Given their current strong task performance, as well as their credibility within the organization and understanding of the work behaviors required for effective performance, performance stars are also likely to be well positioned to create value through their *influences on colleagues*, particularly by sharing knowledge in the context of collaboration or helping (Azoulay et al., 2010; Oettl, 2012), as well as by mentoring (Noe, 1988) and shaping work norms (Lacetera et al., 2004). However, they are not able to provide access to external resources that may be provided by universal or status stars.

Status Stars

Status stars are individuals who demonstrate moderately high (but not exceptional) task performance and enjoy broad external status among stakeholder groups who are strategically relevant for an organization (an important point, as individuals' and organizations' status is likely to vary across different contingencies, with particular audiences carrying greater strategic weight than others (D'Aveni, 1996)). We identify three subcategories of status stars – affiliation-based stars, former universal stars, and networking stars. For all three groups, external prestige enables these stars to create significant value by spanning the boundaries separating their organizations and the external environment. Thus, on one hand, status stars may create significant value by providing their organizations with *access to external resources*, including through the attraction and support from external stakeholders, including customers (Podolny,

1993, 1994), investors, potential new hires (Groysberg et al., 2011), and relevant governing bodies (Dokko & Rosenkopf, 2010). On the other hand, status stars may also use their prestige to create value through their *influences on colleagues* – for instance, by providing recognition and potential network connections by working with (Simcoe & Waguespack, 2011) or sponsoring individual colleagues among external actors in the status star's network (Higgins, 2001; Kram, 1985). However, the roots of individuals' status may vary significantly and these differences have implications for different types of status stars' distinct potential sources of value creation.

Affiliation-based stars. Affiliation-based status stars are individuals who enjoy broad status as a result of their close personal connections with and/or sponsorship by an elite individual or institution (Merton, 1973). This form of status attainment is based on the exposure and favorable attributions accorded to individuals based on their associations with high status actors and their early acceptance into the “inner circles” of an industry's elite (Judge et al., 2004; Long, Allison, & McGinnis, 1979), which is thought to result in preferential access to resources and opportunities in the form of prestigious placements (Bidwell, Won, Barbulescu, & Mollick, 2014; Judge et al., 2004) and access to research funding, as well as favorable evaluations of an individual's work (Merton, 1968; Simcoe & Waguespack, 2011). Research confirming the prevalence of this phenomenon has appeared in the study of academic careers, which has shown that early career placements, salary, and peer recognition depend not only on an individual's productivity but also on the prestige of his or her advisor and institution (Allison & Long, 1987; Cable & Murray, 1999; Judge et al., 2004). Hollywood represents another context replete with affiliation-based status stars, with critics citing nepotism as the root of opportunities and success for many emerging actors and actresses (Sastry, 2012; Zara, 2012).

Because affiliation-based stars' status is either biologically or figuratively inherited,

rather than rooted in a demonstrated quality (e.g., prior exceptional performance or network development capabilities, as in the case of other types of status stars discussed below), their contributions to value creation, relative to other status stars, are likely to be limited to providing benefits available through their inherited status and network positions. In particular, these stars may create exceptional value by providing their organizations *access to external resources* or through their *influences on colleagues*, such as by sponsoring their colleagues among relevant actors in their networks. Unlike other status stars (whose status is rooted in some underlying capability), affiliation-based stars do not have a basis for significantly influencing colleagues through the shaping of work norms, mentoring, or knowledge transfer.

Former universal stars. A second type of status star is a former universal star whose task performance has declined. For these stars, the individual's previous exceptional task performance or extraordinary cumulative task performance record and/or the preferential network position they occupy based on their prior task performance as a universal star allows them to continue to enjoy external status despite their present unexceptional task performance (Merton, 1968). This is important, as these status stars are likely to continue to benefit from many of the external network- and status-based resources acquired through their universal star status beyond the decline in their task performance (Bothner et al., 2012). While these stars may make more limited contributions than current universal stars, this distinction is not always held in the literature. Indeed, several empirical studies which have focused on both the performance- and status-oriented spillovers of star scientists on their organizations (e.g., Hess & Rothaermel, 2011; Rothaermel & Hess, 2007; Tzabbar & Kehoe, 2014) classify individuals as stars based on cumulative status and performance and do not impose a requirement of high current performance for an individual's classification as a star (i.e., beyond the extent to which low current task

performance reduces mean cumulative task performance relative to industry peers). Within academia, we can think of senior faculty members at research universities who would have been considered universal stars in the prime of their research careers but who have scaled back on publishing scholarly research in favor of creating value through other types of professional activities (e.g., mentoring, administration, writing textbooks, focusing on outreach) but who have nonetheless maintained broad status in their academic fields of study.

Beyond providing *access to external resources* (including through the attraction of external stakeholders), former universal stars are positioned to create exceptional value in two additional ways that set them apart from other types of status stars – both of which center on significant *influences on their colleagues*. First, due to their previous exceptional task performance, former universal stars are likely to possess both broad status *as well as* a deep tacit understanding of how task excellence is achieved. Thus, whereas other types of status stars may be somewhat limited in their abilities to create value through knowledge-based resources which require complex processing and integration, former universal stars are well positioned to create value by combining their broad status and expert knowledge in identifying, accessing, and integrating valuable knowledge-based resources and opportunities to facilitate the task performance of their colleagues and broader organizations. Second, these stars' understanding of the requirements for effective task performance make them well suited to mentor junior employees with high performance potential by providing advice on how to realize consistent success in their task performance (Allen, Poteet, & Russell, 2000; Kram & Hall, 1996).

Networking stars. Networking stars' status is rooted in their capabilities for effective network development and management (Lin, Ensel, & Vaughn, 1981) rather than in inherited networks from prestigious affiliations or in prior exceptional task performance. Importantly,

significant differences exist in individuals' abilities and propensities to build and manage their professional networks (Wolff & Moser, 2009), leading to the perpetual positioning of some individuals in more valuable networks and network positions (Cross & Thomas, 2008; Sasovova, Mehra, Borgatti, & Schippers, 2010). A practical example of the existence and consequences of these differences across individuals is illustrated in Dokko and Rosenkopf's (2010) study of technical professionals in the U.S. wireless telecommunications industry. These authors find that differences in individuals' network positions among relevant external constituents affect their employing organizations' influence over the technical standards governing the industry.

Networking stars are positioned to create value in two unique ways beyond providing their peers and broader organizations with *access to external resources* (including, importantly, access to and sponsorship among their network connections) (Tushman & Romanelli, 1983; Tushman & Scanlan, 1981). First, with respect to exerting positive *influence on their colleagues*, networking stars may leverage their unique skills by mentoring colleagues on effectively developing and managing their professional networks (Higgins, 2001; Higgins, Chandler, & Kram, 2007). In this way, these stars' colleagues may benefit not only from the networking stars' social ties but also from the ability to locate themselves in valuable network positions – potentially in different networks altogether. Second, relative to *all* other stars, networking stars may provide their organizations access to novel external resources in the form of novel networks – and may uniquely support organizations' change efforts by helping an organization to break into new industries, markets, or customer bases through the strategic development of network ties among new external audiences (Cross & Thomas, 2008). This is possible because a networking star's prestigious standing and access to external networks are not inherited or otherwise constrained by pre-existing structures (i.e., in the way that an affiliation-

based status star's networks are likely to be), but rather are based on the star's own network management capabilities (Casciaro, Gino, & Kouchaki, 2014; Sasavova et al., 2010) which can be employed to meet the changing needs of the organization (Cross & Thomas, 2008).

AT WHAT COST? SECURITY OF STAR STANDING AND STARS' VALUE CAPTURE

While the exceptional value creation associated with stars is well documented, scholars and practitioners have questioned whether the benefits stars bring to organizations warrant the significant costs which have been linked to their employment. In the sections that follow, we provide insights into two questions that are central to this concern: (1) *what factors predict how secure (or conversely, vulnerable) a star is in his or her star standing?* In other words, how can an organization determine the likely sustainability of a star's standing?; and (2) *how much value is a star likely to capture relative to the value he or she creates?* Framed differently, what are the expected returns associated with employing different types of stars? These issues are likely to be of equal importance to stars and their employing organization.

Security of Star Standing

Two factors are likely to be critical in determining a star's relative security (or, conversely, vulnerability) in his or her star standing: the breadth of sources of exceptional value creation underlying the star's current standing, and the star's capabilities to renew or "re-achieve" star standing should the star's current areas of excellence become obsolete (Pfeffer, 1981). We can think of the first factor as a form of diversification of a star's value creation portfolio and can explain it by extending this investment analogy. Simply, to the extent that a greater number of personal attributes underlie a star's current standing, that standing is likely to be more stable or resilient if one of these attributes either is lost or ceases to be the source of exceptional value creation because the star has other sources of exceptional value creation

available. Referring to Table 1, a star with the capacity to create exceptional value through all three broad forms of value creation (i.e., exceptional task performance, access to external resources, and influence on colleagues) is likely to have greater security than a star who can create value through only one or two forms of contribution. With respect to the typology, this would imply that in general, universal stars are more secure in their star standing than are status stars and performance stars.

Proposition 1a: Ceteris paribus, universal stars are more secure (less vulnerable) in their star standing than are status stars and performance stars.

This logic also provides guidance in predicting variance in the security of star standing among stars of the same type. For instance, universal and performance stars who hold narrow expertise are more prone to redundancy and thus enjoy less security in their star standing than their counterparts whose expertise spans a broader array of knowledge domains (Kehoe & Tzabbar, 2015). Similarly, status stars whose prestige resides with a relatively narrower external audience are more prone to redundancy in their networks or status (i.e., as there is a greater likelihood that another individuals will gain prestige among the same audience) and their status more prone to obsolescence (i.e., as the network resources available from the relevant external audience are likewise likely to be narrower) than their counterparts whose prestige is held in a broader external network or among a larger number of external audiences. Moreover, within a particular form of value creation (e.g., influence on colleagues), contributions made through only one mechanism (e.g., sponsorship) would provide less security than contributions made through multiple mechanisms (e.g., sponsorship and mentoring).

Proposition 1b: Greater breadth in the bases of excellence and forms of value creation associated with a star increases the security (reduces the vulnerability) of the star's standing.

The second factor that is likely to influence a star's security is the star's ability to

preserve or “re-achieve” star standing if and when the star’s current bases of exceptional value creation become irrelevant or obsolete. That is, of relevance here is not how a star currently creates value, but rather whether the star possesses an underlying capability to forge *new* sources of exceptional value creation if the need arises. For instance, if a status star’s industry contacts or broader network lose relevance or value due to a strategic change in an organization or a broader redirection of the industry, the star is likely to be better able to preserve her star standing if she not only has a preferential position in her current network, but also an ability to achieve a favorable position in a relevant new network (e.g., as in the case of a networking star) or the expertise required to achieve renewed excellence in her task performance (e.g., as in the case of some former universal stars who still hold requisite relevant task expertise). Following this logic, in general, performance stars, networking stars, and some former universal stars are more secure in their star standing than are affiliation-based stars, whose star standing is rooted in an inherited network or status position rather than in their own performance or capabilities.

Proposition 1c: The possession of a capability to retain or renew a star’s bases of excellence increases the security of the star’s standing, such that performance stars, networking stars, and some former universal stars are more secure (less vulnerable) in their star standing than are affiliation-based stars.

Stars and Relative Value Capture

Theorizing on rent appropriation suggests three factors outside of collective action that affect individuals’ bargaining power for organizational rents. Specifically, Coff (1999) suggests that an individual’s ability to capture value in an organizational context is likely to be greater to the extent that a) the individual has access to unique information or the ability to make unique and valuable contributions, b) the firm faces high replacement costs if the individual leaves, and c) the employee faces low exit costs. If we accept that stars’ rent appropriation outcomes are some function of these three factors, we can evaluate how stars with different profiles of

individual qualities and contributions are likely to fare in the appropriation of organizational rents. Beyond evaluating stars' absolute value capture, and perhaps of greater relevance to the quest by organizations for sustained competitive advantage through stars, we can evaluate stars' value capture *relative to the value they create* in an organization. We can think of this measure as a ratio of Star Value Capture to Star Value Creation from a star's perspective, and as the inverse of an organization's return on employing the star from the firm's perspective.

First, universal stars' ascendance to the top of the performance spectrum points to the uniqueness of their value (Groysberg et al., 2008; Zucker & Darby, 1997). Further, much of universal stars' contributions to value creation are likely to be rooted jointly in their tacit expertise (Hitt, Bierman, Shimizu, & Kockhhar, 2001) and in the broad status developed as a result of their successful experience in a field over time (Hess & Rothaermel, 2011). These characteristics point to the rarity of the information and resources provided through universal stars and suggest they hold a favorable position with respect to the first requirement for capturing substantial value. Second, the slow accumulation process associated with the complex resources (e.g., tacit knowledge, favorable network positions) underlying a universal star's contributions also make them difficult to replace (Amit & Schoemaker, 1993; Dierickx & Cool, 1989) or substitute (Bowman & Ambrosini, 2000) in the case of a universal star's departure. This points to high replacement costs for the organization and further contributes to these stars' significant bargaining power. Third, universal stars' external status improves their mobility options, thereby reducing their exit costs (Coff, 1999). Although stars' performance may not remain stable during a period of transition to a new firm (Groysberg & Lee, 2009; Groysberg, Lee, & Nanda, 2008), universal stars are likely to enjoy greater employment options relative to their less productive and/or lower status peers (Gardner, 2005). In combination, these factors point to universal stars'

immense bargaining power relative to other employees for the capture of value in organizations.

Status stars may also be positioned to capture significant value in an organization for at least two reasons. First, whereas a significant component of the contributions made by universal stars is their directly observable task performance, the potential exit of a status star primarily threatens the loss of invisible or indirect sources of value creation. These sources of value creation are rooted in a complex web of interpersonal relationships which may be perceived as rare, unique, and valuable absent information suggesting otherwise. Ambiguity around the uniqueness and value of status stars' contributions may increase their relative value capture by obscuring the actual loss an organization would face in the case of a status star's departure (Coff, 1997). Second, status stars' broad external status affords them more employment alternatives than other individuals (aside from universal stars) (Gardner, 2005), making the threat of their exit more legitimate. In sum, the complex nature of status stars' contributions may increase their bargaining power relative to other stars whose contributions are more concrete and measurable. It is also worth pointing out that former universal stars – relative both to other types of status stars and to universal and performance stars – may also enjoy increased value capture relative to their absolute value creation as they continue to benefit from the generous levels of value capture they achieved in prior periods of exceptional performance (i.e., as universal stars). This may be a result of cumulative raises and rewards granted over the course of their successful tenure and the fact that an organization may have greater confidence in their performance potential relative to other individuals who have accumulated a much shorter list of performance accomplishments in their tenure (MacDonald & Reynolds, 1994).

Performance stars are likely to hold the weakest position of all stars in the quest to capture value. First, although the knowledge and skills underlying performance stars'

exceptional task performance may indeed be unique, the extent of a performance star's contributions are likely to be less ambiguous and complex than those of universal or status stars, leaving little room for the star to leverage information asymmetries about his or her value creation in the bargaining process. As a result, relative to other types of stars, performance stars are likely to be substantially less likely to capture more value than they generate in an organization (Coff, 1997). Second, because performance stars lack external status, their external employment options are likely to be limited, pointing to a significantly decreased threat of departure relative to the higher-status universal and status stars (Gardner, 2005).

Proposition 2: Ceteris paribus, universal stars and status stars will capture more value -- relative to the value they create -- than performance stars, and former universal stars will capture more value relative to other status stars.

EXAMINING STARS IN THE BROADER ORGANIZATIONAL CONTEXT

Stars do not work in isolation. Many of the contributions through which stars create exceptional value involve interdependencies with other organizational resources. Equally importantly, stars act with volition. Just because a star *can* create value through a particular type of contribution does not mean that the star will do so. An important, holistic set of implications from the proposed typology and theorizing concerns how differences in stars' relative security in their star standing and abilities to capture value shape their affective and behavioral tendencies as they interact with other resources in their organizational environments – and, ultimately, the nature of contributions through which different stars are in fact likely to create value.

Of particular relevance in this regard is how stars respond to potential complementarities and/or redundancies with other organizational resources. The recognition of a potential complementarity or the observation of redundancy between a star and other resources in an organization does not guarantee that the predicted patterns of value creation and/or buffering

against loss will emerge (Ployhart & Moliterno, 2011). Rather, the realized outcomes of such resource combinations depend in part on stars' affective and behavioral responses to the prospect of complementarities and/or redundancies. This is important, as a star who rejects the prospect of co-employment with redundant resources in an organization may demonstrate a variety of negative responses to actual or perceived redundancies, including engaging in self-interested behaviors that interfere with the collective's task completion (Groysberg et al., 2011) or undermining organizational goals (Coff, 2010), such as by constraining the opportunities of colleagues in order to protect the star's own perceived value in an organization (Bunderson & Reagans, 2011; Kehoe & Tzabbar, 2015). Likewise, a star who foresees limited personal gain from investments in complementarities may demonstrate varying levels of resistance to participation in the activities required for value to be realized from these complementarities.

Complementarities

Complementarities between resources enhance their combined value-creating potential (Black & Boal, 1994; Ployhart, Nyberg, Reilly, & Maltarich, 2014), such that the resources create greater value in combination than the sum of the value they would create in isolation (Adegbesan, 2009), or the resources together create more value in one context than they would in other contexts (LeBreton-Miller & Miller, 2015; Schmidt & Keil, 2013).

Resources which are complementary to stars may include other human capital (e.g., Groysberg et al., 2008; Hitt et al., 2001) or other types of resources altogether (e.g., intellectual property (Ganco, Ziedonis, & Agarwal, 2015); strategic alliances (Hess & Rothaermel, 2011; Sirmon, Hitt, Ireland, & Gilbert, 2011)). For example, Hess and Rothaermel (2012) found that star scientists (who provide research capabilities and bridges to the scientific community where changes in technology and basic science that are relevant to drug development occur)

complemented pharmaceutical firms' downstream strategic alliances leveraged for manufacturing capabilities and market access because these resources provide unique types of knowledge which were required at different stages in the drug development process. In this context, pharmaceutical firms benefitted more from the employment of star scientists and from engaging in downstream alliances when the other resource was also present in the organization. Adapting an example provided by Campbell, Coff, and Kryscynski (2012), the employment of a star faculty member with exceptional case writing expertise employed by a business school that invests in additional, complementary resources oriented toward its strategic focus on case writing (e.g., a reputation for publishing quality cases, an established distribution system which maximizes case visibility and dissemination) is likely to lead to greater collective value creation at the school level than would be achieved by these resources on their own.

Stars' differential abilities to capture the surplus value they help create through complementarities are likely to shape their unique motives to invest in realizing potential complementarities. Campbell, Ganco, Franco, and Agarwal (2012) suggest that an employee's bargaining power with respect to the appropriation of surplus value created by complementarities depends on: a) the relative importance of the firm's complementary assets relative to the employee's human capital in value creation, and b) the employee's ability to transfer or replicate complementary assets in another context (i.e., outside the firm). This latter condition suggests that, among stars, universal stars and status stars can be expected to appropriate greater returns from complementarities than performance stars for several reasons. First, among these three types of stars, performance stars likely enjoy the fewest external employment opportunities. Second, *even if* performance stars are able to obtain comparable employment externally, their lack of status outside the current organization is likely to limit their abilities to command

influence over similar or substitutive resources to create comparable complementarities in another organizational context. In contrast, universal stars and status stars are likely to have stronger bargaining power than performance stars based on their broad prestige and plentiful opportunities outside the firm, and are further likely to be better equipped to transfer or replicate complementary resources based on their status in the external market. The net result is that while all stars stand to gain in value capture from complementarities, those stars who capture the least value relative to the value they create (i.e., performance stars) are also the worst positioned to appropriate surplus value created through their complementarities with other resources.

Importantly, value capture is not the sole motivator of individuals' behavior. A second important determinant of stars' propensities to invest in realizing complementarities is the relative security of their star standing, as complementarities expand the sources of value creation attributable to the star. For instance, in the case of a universal star faculty member known for her expertise in leadership, her realization of complementarities through her investment in joint value creation activities with her school's leadership center results in an expansion of the faculty member's independent sources of value creation (e.g., sole-authored journal publications, development and teaching of a course on leadership) to include the activities underlying newly created value in conjunction with the center (e.g., the organization of a leadership conference within the school; creation of a scholarship to support students interested in studying leadership).

For stars whose star standing is more vulnerable, such additional bases of value creation may serve as a buffer against the potential loss of their star standing for two reasons. First, a star's connection to additional sources of value creation necessarily reduces the risk that another resource will emerge as a perfect or close substitute for the star (Tzabbar & Kehoe, 2014), particularly since these additional sources of value are likely based on complex and ambiguous

interdependencies between the star and other complementary resources (Ennen & Richter, 2010). Second, underlying these bases of value creation is likely the organization's investment in assets which are cospecialized to the star's qualities or contributions (Coff, 1999), representing a commitment on the part of the organization to maintaining a strategic focus in which the focal complementarities are supported. Thus, for more vulnerable stars, engaging in activities to create value from complementarities with other resources may be an attractive way to both capture more value and achieve greater security in their star standing (Chen, et al., 2012).

In contrast, investing in complementarities may appear less desirable as a star's security increases. Investments in complementarities often require investments in firm-specific human capital (which may or may not be transferable across organizations (Campbell et al., 2012)) and may detract from a star's alternative options for value creation or personal growth. Moreover, it can be difficult to disentangle the precise surplus value attributable to each resource underlying a complementarity, pointing to a risk that external observers may underestimate the scope or importance of a star's contributions. Consequently, more secure stars (who stand to benefit less from increased security) may be more likely to perceive investments in complementarities as creating constraints on their future mobility and development and may thus be less likely to participate in the realization of complementarities than their more vulnerable counterparts.

Redundancies

Any overlap or substitutability in multiple stars' qualities – or in the qualities of stars and non-stars or other organizational resources – represents a potential source of redundancy.

Redundancies between stars and other resources can exist in the qualities associated with the resources – e.g., multiple status stars holding prestige among the same external audience – or in contributions to value creation, where a star's means of value creation may be substituted by

another resource that creates the same form of value through different mechanisms. For example, Lepak, Smith, and Taylor (2007) share the story of an exceptional machinist possessing an exceptional, rare talent for completing a finishing process who was ultimately replaced by a high-tech machine that performed the task with equivalent consistency and quality.

Redundancies involving stars can have significant consequences for the creation, destruction, and appropriation of value in organizations. On one hand, redundancies between a star and other resources are likely to *limit value creation* by the star in at least two ways. First, by introducing an alternative (or additional) source of a star's task- or status-based contributions, redundancies eliminate or reduce the unique value that a star offers an organization (Kehoe & Tzabbar, 2015). For example, Hess and Rothaermel (2011) found that stars in pharmaceutical firms tend to exhibit knowledge redundancies with upstream research alliances and that organizations' innovative performance benefitted less from a star's presence when the organization was also involved in an upstream research alliance. Second, because much of a star's influence among other organizational members is due to the uniqueness and magnitude of the star's contributions, redundancies are likely to reduce a star's influence among colleagues (Pfeffer, 1981), who may be less eager to adopt the star as a role model, employ the star's knowledge, or support the star's initiatives given less reason to view the star as a unique and exceptional figure (Kehoe & Tzabbar, 2015). For example, if a star football player's exceptional skills come to be matched by those of another teammate, the star's status is likely to decrease, and he is likely to lose his influence in shaping the team's routines (Marr & Thau, 2014).

On the other hand, a star's redundancies with other resources may also serve to buffer an organization against loss – value destruction – in the case of the star's departure, withdrawal, or performance decline. The presence of resources that overlap with the star's attributes or

contributions offer an alternative source of the value created by the star. These resources reduce the organization's dependence on the star and mitigate the disarray or loss that occurs in the case of the star's departure (LeBreton-Miller & Miller, 2015). For example, Tzabbar and Kehoe (2014) found that when a star's innovative involvement in an organization was lower (reflecting greater capacity of other inventors to assume central roles in the R&D process), the star's departure was less detrimental to the subsequent innovative performance of the organization.

We can expect stars to generally demonstrate negative responses to redundancies with other resources as a function of the decreases in value creation and value capture that stars are likely to experience when alternative sources of their qualities or contributions come to light. Additionally, stars whose star standing is less secure are more threatened by the presence of a potential substitute for their contributions, which may undermine not only their incremental value creation but also their overall uniqueness in the organization. Given this threat, these more vulnerable stars may invest more significant efforts in undermining value-creating activities which involve or support potentially redundant resources (Bendersky & Hays, 2012; Magee & Galinsky, 2008). For example, Kehoe and Tzabbar (2015) found that star scientists with narrower expertise (which may be perceived as more vulnerable to redundancy) were less generous in their sharing of opportunities for innovative leadership with colleagues than were stars with broader expertise. In contrast, stars who can rely on multiple sources of exceptional value creation are less threatened by the presence of other resources which may substitute for only one of the several means through which the star creates value, and are less likely to invest in demonstrating extremely negative responses to redundancies with other resources.

IMPLICATIONS FOR RESEARCH ON STARS AND HUMAN CAPITAL

Implications for Extant Knowledge

By disentangling task performance and status as simultaneously important qualities underlying exceptional value creation, we proposed a typology that reflects the distinct contributions offered by different types of stars and provides for improved clarity and precision in the development of knowledge in this domain (Call, Nyberg, & Thatcher, 2015). With this typology we expand our conceptualization of value creation to include contributions that span beyond those captured in the evaluation of task performance, thereby recognizing the importance of the many less direct ways that stars may support organizations' performance. This perspective allows assessment of value creation across the full range of exceptional contributors in organizations— some of whom have gone unrecognized and undervalued in prior star research, and some of whom have been combined together under a single definition. In this way, we contribute to the dialogue related to how stars and their contributions are most appropriately defined and evaluated (e.g., Beck et al., 2014; Call et al., 2015; O'Boyle & Aguinis, 2012).

The typology also has important implications for the role of stars in human capital emergence (Ployhart & Moliterno, 2011). While prior scholarship has demonstrated the unique importance of stars in shaping unit-level outcomes (Ployhart et al., 2014) through both their exceptional individual task performance and through the positive and negative influences they convey on their colleagues and broader work contexts (Groysberg & Lee, 2008; Groysberg et al., 2011; Tzabbar, 2009), limited research to date has examined the conditions under which stars' effects on the broader value-creating potential of a unit's human capital are likely to vary (c.f., Hess & Rothaermel, 2011; Rothaermel & Hess, 2007), and even less attention has been given to how differences in stars' individual qualities affect these outcomes (see Grigoriou & Rothaermel (2014), who examined the role of stars' network positions and Kehoe & Tzabbar (2015) who examined the role of breadth in stars' expertise, for the only examples we located). We address

this limitation by identifying distinct paths through which different types of stars may contribute to unit-level value creation based on their unique individual characteristics, and by shedding light on how different types of stars' complementarities and redundancies with other organizational resources are likely to affect the creation and appropriation of value in the process of emergence.

More broadly, the typology provides guidance in examining stars from a more contextualized perspective, rather than in isolation. Building on the commonalities and distinctions across different types of stars, we have developed theory that informs how the interdependencies between stars and other resources are likely to affect value creation and value capture in an organization, as well as the nature of the affective and behavioral responses different types of stars are likely to display in the face of potentially complementary or redundant resources. These insights highlight the interdependent nature of value creation associated with stars while pointing to a critical distinction which must be employed in the management of resource portfolios involving human capital: unlike other resources, stars and other employees act with volition. Because stars are motivated to protect and advance both their value capture and their star identities and may be willing to sacrifice short-term gains to do so (Marr & Thau, 2014), the effective management of complementarities and redundancies between stars and other resources requires that these resource combinations are carefully negotiated to account for the ambitions, concerns, and other motivational drivers of the particular stars that they involve.

Moreover, stars' interdependencies with other organizational members suggest the importance of non-stars' volition as well. An important exception to our classification of stars warrants attention here. While we focused on the role of broad *external* (i.e., as opposed to internal) status as an antecedent to exceptional value creation, inherent in our theorizing is an assumption that status external to an organization represents a broader scope of status than – and

is thus likely to encompass – an individual's status *within* a focal organization. However, this may not always be the case, and status stars and universal stars who are held in high regard in an industry may not necessarily be highly regarded within their own firm. This is important, as many of the paths through which stars create value through external status (e.g., attracting resources for use by other organizational members; connecting colleagues with external network ties) involve interdependencies with their internal colleagues, such that a lack of cooperation from other organizational members is likely to hinder such stars in their efforts to create value (Bunderson & Reagans, 2011). If left unchecked, such low regard among other organizational members is likely to both diminish such stars' value to the organization and/or lead to the star's withdrawal. Thus, an important consideration in the hiring and management of stars concerns how well a star is received by other organizational members – an outcome that depends on the fit between the individual attributes of the star and the organization's social context.

Future Research Directions

It is likely that the existence, prevalence, and security of the different types of stars vary across organizational and industry contexts. For instance, whereas affiliation-based stars have been recognized as quite common in the film industry, it may be more difficult to inherit status in more meritocratic industry contexts (Judge et al., 2004). Related, it may be difficult to *sustain* particular types of stardom in certain settings – e.g., performance star standing may be difficult to sustain for an extended period in a field such as academia where ongoing access to research opportunities and resources often requires some level of status outside a faculty member's university. Likewise, in the case of affiliation-based stars in an academic context, while inherited status may provide junior faculty members an edge in securing favorable initial job placements and accessing resources and research support early in their careers, if these individuals fail to

bolster their inherited status through active network management or exceptional task performance, this status may come to be viewed as unwarranted and hence eventually dissipate. Future research would benefit from an exploration of the contextual factors that shape the prevalence and sustainability of different types of stardom, the relative opportunities and propensities of stars to add bases of excellence or contributions to their repertoires to increase the security of their stardom and their appropriation of value, and the relative value associated with different types of stars' distinct contributions across contexts (Call et al., 2015).

Another fruitful direction for future research involves examining how organizations manage different types of stars in the context of their broader resource portfolios; or from an alternative perspective, how different approaches to managing stars – along with their complementarities and redundancies with other organizational resources – affect short-term and long-term patterns of value creation, appropriation, and preservation. Within this line of inquiry, we envision questions such as: Which types of stars – or combinations of stars and other resources – help organizations to achieve particular short-term and/or long-term strategic objectives? How can organizations best support the non-task-based contributions of different types of stars which are often not recognized in formal performance evaluations but which help organizations to create and preserve value? Under what conditions does the promotion of complementarities and/or redundancies between stars and other resources promote competitive advantage, in light of the reductions in value creation, shifts in value appropriation, and/or potentially unpredictable behavioral responses from stars that they may elicit?

Finally, we believe future research in the area of strategic human capital would benefit from an expanded perspective of *all* employees' contributions to value creation. The norm in research on human capital continues to be a focus on assessing employees' contributions based

on their individual task performance and assessing employees' value creation potential with human capital proxies associated with such task performance (e.g., industry and/or organizational experience (Mackey, Molloy, & Morris, 2014; Mayer, Somaya, & Williamson, 2012); prior performance levels (Ganco et al., 2015); personality and cognitive ability (Ployhart, Van Iddekinge, & MacKenzie, 2011). Yet, as we have explored in the context of stars, and as has been established in prior theorizing on human capital emergence (e.g., Nyberg, Moliterno, Hale, & Lepak, 2014; Ployhart & Moliterno, 2011), many of the contributions through which individuals create value occur through interdependencies with other organizational resources are not captured in typical task performance measures, and are rooted in personal characteristics that extend beyond the requirements of individual task performance. We have provided in the proposed typology a starting point for future inquiry into how specific individual characteristics shape different employees' distinct influences on value creation at the individual level and on human capital emergence at the unit level and would encourage additional exploration of these drivers of value creation in future scholarship.

CONCLUSION

We have revisited several fundamental assumptions underlying our understanding of stars and in so doing have developed a typology which promises both a more comprehensive and a more fine-grained conceptualization of exceptional contributors in organizations. We believe that this typology provides a solid foundation on which future researchers can develop a more nuanced and accurate body of knowledge related to the distinct qualities and contributions of different types of stars – and the likely consequences of their embeddedness among other potentially complementary and redundant resources in their broader organizational contexts.

REFERENCES

- Adegbesan, J. A. 2009. On the origins of competitive advantage: Strategic factor markets and heterogeneous resource complementarity. *Academy of Management Review*, 34: 463-475.
- Allen, T. D., Poteet, M. L., & Russell, J. E. 2000. Protégé selection by mentors: What makes the difference? *Journal of Organizational Behavior*, 21: 271-282.
- Allen, T. D., Eby, L., Poteet, M., Lentz, E., & Lima, L. 2004. Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology*, 89: 127-136.
- Allison, P. D., & Long, S. 1987. Interuniversity mobility of academic scientists. *American Sociological Review*, 52: 643-652.
- Amit, R., & Schoemaker, P. J. 1993. Strategic assets and organizational rent. *Strategic Management Journal*, 14: 33-46.
- Anderson, C., John, O. P., Keltner, D., & Kring, A. M. 2001. Who attains social status? Effects of personality and physical attractiveness in social groups. *Journal of Personality and Social Psychology*, 81: 116-132.
- Anderson, C., Srivastava, S., Beer, J. S., Spataro, S. E., & Chatman, J. A. 2006. Knowing your place: Self-perceptions of status in face-to-face groups. *Journal of Personality and Social Psychology*, 91: 1094-1110.
- Azoulay, P., Graff Zivin, J., & Wang, J. 2010. Superstar extinction. *Quarterly Journal of Economics*, 25: 549-589.
- Beck, J. W., Beatty, A. S., & Sackett, P. R. 2014. On the distribution of job performance: The role of measurement characteristics in observed departures from normality. *Personnel Psychology*, 67: 531-566.
- Bendersky, C., & Hays, N. 2012. Status conflict in groups. *Organization Science*, 23: 323-340.
- Berger, J., & Zelditch, M. 1985. *Status, rewards, and influence*. San Francisco, CA: Jossey-Bass.
- Berger, J., Cohen, B. P., & Zelditch, M., Jr. 1972. Status characteristics and social interaction, *American Sociological Review*, 37: 241-255.
- Bidwell, M., Won, S., Barbulescu, R., & Mollick, E. 2014. I used to work at Goldman Sachs! How firms benefit from organizational status in the market for human capital. *Strategic Management Journal*, 36: 1164-1173.
- Black, J. A., & Boal, K. B. 1994. Strategic resources: Traits, configurations and paths to sustainable competitive advantage. *Strategic Management Journal*, 15: 131-146.

- Blau, P. M. 1964. *Exchange and power in social life*. New Brunswick, NJ: Transaction Books.
- Bothner, M., Kim, Y. K., & Smith, B. E. 2012. How does status affect performance? Status as an asset vs. status as a liability in the PGA and NASCAR. *Organization Science*, 23: 416-433.
- Bowman, C., & Ambrosini, V. 2000. Value creation versus value capture: Towards a coherent definition of value in strategy. *British Journal of Management*, 11: 1-15.
- Bunderson, J. S. 2003. Recognizing and utilizing expertise in work groups: A status characteristics perspective. *Administrative Science Quarterly*, 48: 557-591.
- Bunderson, J. S., & Reagans, R. E. 2011. Power, status, and learning in organizations. *Organization Science*, 22: 1182-1194.
- Burke, M. A., Fournier, G. M., & Prasad, K. 2007. The diffusion of a medical innovation: Is success in the stars? *Southern Economic Journal*, 73: 588-603.
- Cable, D. M., & Murray, B. 1999. Tournaments versus sponsored mobility as determinants of job search success. *Academy of Management Journal*, 42: 439-449.
- Call, M. L., Nyberg, A. J., & Thatcher, S. M. B. 2015. Stargazing: An integrative conceptual review, theoretical reconciliation, and extension for star employee research. *Journal of Applied Psychology*, 100: 623-640.
- Campbell, B. A., Coff, R., & Kruscynski, D. 2012. Rethinking sustained competitive advantage from human capital. *Academy of Management Review*, 37: 376-395.
- Campbell, B. A., Ganco, M., Franco, A. M., & Agarwal, R. 2012. Who leaves, where to, and why worry? Employee mobility, entrepreneurship and effects on source firm performance. *Strategic Management Journal*, 33: 65-87.
- Casciaro, T., Gino, F., & Kouchaki, M. 2014. The contaminating effects of building instrumental ties: How networking can make us feel dirty. *Administrative Science Quarterly*, 59: 705-735.
- Chen, Y. R., Peterson, R. S., Phillips, D. J., Podolny, J. M., & Ridgeway, C. L. 2012. Introduction to the special issue: Bringing status to the table—attaining, maintaining, and experiencing status in organizations and markets. *Organization Science*, 23: 299-307.
- Coff, R. W. 1997. Human assets and management dilemmas: Coping with hazards on the road to resource-based theory. *Academy of Management Review*, 22: 374-402.
- Coff, R. W. 1999. When competitive advantage doesn't lead to performance: The resource-based view and stakeholder bargaining power. *Organization Science*, 10: 119-133.

- Coff, R. W. 2010. The coevolution of rent appropriation and capability development. *Strategic Management Journal*, 31: 711-733.
- Coff, R. W., & Kryscynski, D. 2011. Invited editorial: Drilling for micro-foundations of human capital-based competitive advantages. *Journal of Management*, 37: 1429-1443.
- Cole, J. R., & Cole, S. 1973. *Social stratification in science*. Chicago, IL: University of Chicago Press.
- Conway, J. M. 1999. Distinguishing contextual performance from task performance for managerial jobs. *Journal of Applied Psychology*, 84: 3-13.
- Cross, R., & Thomas, R. J. 2008. How top talent uses networks and where rising stars get trapped. *Organizational Dynamics*, 37: 165-180.
- D'Aveni, R. A. 1996. A multiple-constituency, status-based approach to interorganizational mobility of faculty and input-output competition among top business schools. *Organization Science*, 7: 166-189.
- Dierickx, I., & Cool, K. 1989. Asset stock accumulation and the sustainability of competitive advantage. *Management Science*, 35: 1504-1511.
- Dokko, G., & Rosenkopf, L. 2010. Social capital for hire? Mobility of technical professionals and firm influence in wireless standards committees. *Organization Science*, 21: 677-695.
- Ennen, E., & Richter, A. 2010. The whole is more than the sum of its parts—or is it? A review of the empirical literature on complementarities in organizations. *Journal of Management*, 36: 207-233.
- Flynn, F. J., & Amanatullah, E. T. 2012. Psyched up or psyched out? The influence of coactor status on individual performance. *Organization Science*, 23: 402-415.
- Frank, R. H. 1985. *Choosing the right pond: Human behavior and the quest for status*. New York, NY: Oxford University Press.
- French, J. R. P., & Raven, B. 1959. The bases of social power. In D. Cartwright (Ed.), *Studies in social power*: 150-167. Ann Arbor, MI: University of Michigan Press.
- Furukawa, R., & Goto, A. 2006. The role of corporate scientists in innovation. *Research Policy*, 35: 24-36.
- Ganco, M., Ziedonis, R. H., & Agarwal, R. 2015. More stars stay, but the brightest ones still leave: Job hopping in the shadow of patent enforcement. *Strategic Management Journal*, 36: 659-685.

- Gardner, T. M. 2005. Interfirm competition for human resources: Evidence from the software industry. *Academy of Management Journal*, 48: 237-256.
- Grigoriou, K., & Rothaermel, F. T. 2014. Structural microfoundations of innovation: The role of relational stars. *Journal of Management*, 40: 586-615.
- Groysberg, B., & Lee, L. 2008. The effect of colleague quality on top performance: The case of security analysts. *Journal of Organizational Behavior*, 29: 1123-1144.
- Groysberg, B., & Lee, L. 2009. Hiring stars and their colleagues: Exploration and exploitation in professional service firms. *Organization Science*, 20: 740-758.
- Groysberg, B., & Lee, L. 2010. Star power: Colleague quality and turnover. *Industrial and Corporate Change*, 19: 741-765.
- Groysberg, B., Lee, L., & Nanda, A. 2008. Can they take it with them? The portability of star knowledge workers' performance. *Management Science*, 54: 1213-1230.
- Groysberg, B., Polzer, J. T., & Elfenbein, H. A. 2011. Too many cooks spoil the broth: How high-status individuals decrease group effectiveness. *Organization Science*, 22: 722-737.
- Hess, A. M., & Rothaermel, F. T. 2011. When are assets complementary? Star scientists, strategic alliances, and innovation in the pharmaceutical industry. *Strategic Management Journal*, 32: 895-909.
- Higgins, M. C. 2001. Changing careers: The effects of social contexts. *Journal of Organizational Behavior*, 22: 595-618.
- Higgins, M. C., Chandler, D. E., & Kram, K. E. 2007. Developmental initiation and developmental network. In B. Ragins & K. E. Kram (Eds.), *The handbook of mentoring at work: Theory, research, and practice*. Thousand Oaks, CA: Sage Publications.
- Higgins, M. J., Stephan, P. E., & Thursby, J. G. 2011. Conveying quality and value in emerging industries: Star scientists and the role of signals in biotechnology. *Research Policy*, 40: 605-617.
- Hitt, M. A., Bierman, L., Shimizu, K., & Kockhhar, R. 2001. Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal*, 44: 13-28.
- Huckman, R. S., & Pisano, G. P. 2006. The firm specificity of individual performance: Evidence from cardiac surgery. *Management Science*, 52: 473-488.
- Judge, T. A., Kammeyer-Mueller, J. O., & Bretz, R. D. 2004. A longitudinal model of sponsorship and career success: A study of industrial-organizational psychologists. *Personnel Psychology*, 271-303.

- Kehoe, R. R., & 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: 709-727.
- Kram, K. E. 1985. Improving the mentoring process. *Training and Development Journal*, 39: 40-43.
- Kram, K. E., & Hall, D. T. 1996. Mentoring in a context of diversity and turbulence. In E. E. Kossek & S. A. Lobel (Eds.), *Managing diversity: Human resource strategies for transforming the workplace*: 108-136. Cambridge, MA: Blackwell Business.
- Lacetera, N., Cockburn, I. M., & Henderson, R. 2004. Do firms change capabilities by hiring new people? A study of the adoption of science-based drug discovery. *Advances in Strategic Management*, 21: 133-159.
- Larkin, I., & Huang, K. The promotion process at Chung and Dasgupta. LLP. Case Study. Boston. Harvard Business Publishing. 2014.
- LeBretton-Miller, I., & Miller, D. 2015. The paradox of resource vulnerability: Considerations for organizational curatorship. *Strategic Management Journal*, 36: 397-415.
- Lepak, D. P., Smith, K. G., & Taylor, M. S. 2007. Value creation and value capture: A multilevel perspective. *Academy of Management Review*, 32: 180-194.
- Liebesskind, J. P., Oliver, A. L., Zucker, L., & Brewer, M. 1996. Social networks, learning, and flexibility: Sourcing scientific knowledge in new biotechnology firms. *Organization Science*, 7: 428-443.
- Lin, N., Ensel, M., & Vaughn, J. C. 1981. Social resources and strength of ties: Structural factors in occupational status attainment. *American Sociological Review*, 46: 383-405.
- Long, J. S., Allison, P. D., & McGinnis, R. 1979. Entrance into the academic career. *American Sociological Review*, 44: 816-830.
- Lucifora, C., & Simmons, R. 2003. Superstar effects in sport evidence from Italian soccer. *Journal of Sports Economics*, 4: 35-55.
- MacDonald, D. N., & Reynolds, M. O. 1994. Are baseball players paid their marginal products? *Managerial and Decision Economics*, 15: 443-457.
- Mackey, A., Molloy, J. C., & Morris, S. S. 2014. Scarce human capital in managerial labor markets. *Journal of Management*, 40: 399-421.
- Magee, J. C., & Galinsky, A. D. 2008. Social hierarchy: The self-reinforcing nature of power and status. *Academy of Management Annals*, 2: 351-398.

- March, J. G., & Simon, A. S. 1958. *Organizations*. New York, NY: Wiley-Blackwell.
- Marr, J. C., & Thau, S. 2014. Falling from great (and not-so-great) heights: How initial status position influences performance after status loss. *Academy of Management Journal*, 57: 223-248.
- Mayer, K. J., Somaya, D., & Williamson, I. O. 2012. Firm-specific, industry-specific, and occupational human capital and the sourcing of knowledge work. *Organization Science*, 23: 1311-1329.
- Merton, R. K. 1968. The Matthew effect in science. *Science*, 159: 56-63.
- Merton, R. K. 1973. *The sociology of science: Theoretical and empirical investigations*. Chicago, IL: University of Chicago Press.
- Miller, C. C., Glick, W. H., & Cardinal, L. B. 2005. The allocation of prestigious positions in organizational science: Accumulating advantage, sponsored mobility, and contest mobility. *Journal of Organizational Behavior*, 26: 489-516.
- Motowidlo, S. J., & Van Scotter, J. R. 1994. Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology*, 79: 475-531.
- Motowidlo, S. J., Borman, W. C., & Schmit, M. J. 1997. A theory of individual differences in task and contextual performance. *Human Performance*, 10: 71-83.
- Noe, R. A. 1988. An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology*, 41: 457-479.
- Nyberg, A. J., Moliterno, T. P., Hale, D., & Lepak, D. P. 2014. Resource-based perspectives on unit-level human capital: A review and integration. *Journal of Management*, 40: 316-346.
- O'Boyle, E., & Aguinis, H. 2012. The best and the rest: Revisiting the norm or normality of individual performance. *Personnel Psychology*, 65: 79-119.
- Oettl, A. 2012. Reconceptualizing stars: Scientist helpfulness and peer performance. *Management Science*, 58: 1122-1140.
- Oldroyd, J. B., & Morris, S. S. 2012. Catching falling stars: A human resource response to social capital's detrimental effect of information overload on star employees. *Academy of Management Review*, 37: 396-418.
- Paruchuri, S. 2010. Inter-organizational networks, intra-organizational networks, and impact of central inventors: a longitudinal study of pharmaceutical firms. *Organization Science*, 21: 63-80.

- Pfeffer, J. 1981. *Power in organizations*. Marshfield, MA: Pitman Publishing.
- Ployhart, R. E., & Moliterno, T. P. 2011. Emergence of the human capital resource: A multilevel model. *Academy of Management Review*, 36: 127-150.
- Ployhart, R. E., Van Iddekinge, C. H., & MacKenzie, W. I. 2011. Acquiring and developing human capital in service contexts: The interconnectedness of human capital resources. *Academy of Management Journal*, 54: 353-368.
- Ployhart, R. E., Nyberg, A. J. Reilly, G., & Maltarich, M. A. 2014. Human capital is dead: long live human capital resources! *Journal of Management*, 40: 371-398.
- Podolny, J. M. 1993. A status-based model of market competition. *American Journal of Sociology*, 98: 829-872.
- Podolny, J. M. 1994. Market uncertainty and the social character of economic exchange. *Administrative Science Quarterly*, 39: 458-483.
- Podolny, J. M. 2005. *Status signals: A sociological study of market competition*. Princeton, NJ: Princeton University Press.
- Ravid, S. A. 1999. Information, blockbusters, and stars: A study of the film industry. *The Journal of Business*, 72: 463-492.
- Rothaermel, F. T., & Hess, A. M. 2007. Building dynamic capabilities: Innovation driven by individual-, firm-, and network-level effects. *Organization Science*, 18: 898-921.
- Sasovova, Z., Mehra, A., Borgatti, S. P., & Schippers, M. C. 2010. Network churn: The effects of self-monitoring personality on brokerage dynamics. *Administrative Science Quarterly*, 55: 639-670.
- Sastry, K. 2012. Hollywood Nepotism: These 15 Rising Stars Have Influential Parents in the Biz. Retrieved from <http://www.businessinsider.com/celebrities-with-famous-parents-nepotism-in-hollywood-2012-5>. June 15 2015.
- Schmidt, J., & Keil, T. 2013. What makes a resource valuable? Identifying the drivers of firm-idiosyncratic resource value. *Academy of Management Review*, 38: 206-228.
- Shea, C. M., & Howell, J. M. 2000. Efficacy-performance spirals: An empirical test. *Journal of Management*, 26: 791-812.
- Simcoe, T. S., & Waguespack, D. M. 2011. Status, quality, and attention: What's in a (missing) name? *Management Science*, 57: 274-290.

- Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. 2011. Resource orchestration to create competitive advantage: Breadth, depth, and life cycle effects. *Journal of Management*, 37: 1390-1412.
- Sparrowe, R. T., Liden, R. C., Wayne, S. J., & Kraimer, M. L. 2001. Social networks and the performance of individuals and groups. *Academy of Management Journal*, 44: 316-325.
- Sutton, R. I., & Hargadon, A. 1996. Brainstorming groups in context: Effectiveness in a product design firm. *Administrative Science Quarterly*, 41: 685-718.
- Thye, S. R. 2000. A status value theory of power in exchange relations. *American Sociological Review*, 65: 407-432.
- Tushman, M. L., & Romanelli, E. 1983. Uncertainty, social location and influence in decision making: A sociometric analysis. *Management Science*, 29: 12-23.
- Tushman, M. L., & Scanlan, T. J. 1981. Characteristics and external orientations of boundary spanning individuals. *Academy of Management Journal*, 24: 83-98.
- Tzabbar, D. 2009. When does scientist recruitment affect technological repositioning? *Academy of Management Journal*, 52: 873-896.
- Tzabbar, D., & Kehoe, R. R. 2013. Can opportunity emerge from disarray? An examination of exploration and exploitation following star scientist turnover. *Journal of Management*, 40: 449-482.
- Weber, M. 1978. *Economy and society: An outline of interpretive sociology*. Berkeley, CA: University of California Press.
- Wolff, H., & Moser, K. 2009. Effects of networking on career success: A longitudinal study. *Journal of Applied Psychology*, 94: 196-206.
- Zara, C. 2012. From Willow Smith to Vivienne Jolie-Pitt – Is nepotism out of control in Hollywood? Retrieved from <http://www.ibtimes.com/willow-smith-vivienne-jolie-pitt-nepotism-out-control-hollywood-758359>. June 15 2015.
- Zucker, L. G., & Darby, M. R. 1997. Present at the biotechnological revolution: Transformation of technological identity for a large incumbent pharmaceutical firm. *Research Policy*, 26: 429-446.
- Zucker, L. G., Darby, M. R., & Armstrong, J. S. 2002. Commercializing knowledge: University science, knowledge capture, and firm performance in biotechnology. *Management Science*, 48: 138-153.
- Zucker, L. G., Darby, M. R., & Torero, M. 2002. Labor mobility from academe to commerce. *Journal of Labor Economics*, 20: 629-660.

Table 1
Typology of Stars Based on Task Performance and External Status

Source of Standing		Example	Potential Sources of Exceptional Value Creation		
			Task Performance	Access to External Resources	Influence on Colleagues
Universal Stars <i>p. 9</i>	Exceptional task performance	Star scientist with outstanding record of highly cited publications and/or patents	<ul style="list-style-type: none"> • Exceptional task performance 	<ul style="list-style-type: none"> • Organizational reputation among investors, customers, talent, etc. • Knowledge & information • Opportunities • Exchange partners 	<ul style="list-style-type: none"> • Mentoring • Knowledge transfer & capability development • Shaping of work norms and practices • Sponsorship
	Broad external status				
Performance Stars <i>p. 12</i>	Exceptional task performance	Associate at law firm in inward facing role with exceptional task performance but little external recognition	<ul style="list-style-type: none"> • Exceptional task performance 		<ul style="list-style-type: none"> • Mentoring • Knowledge transfer & capability development • Shaping of work norms and practices
Status Stars <i>Affiliation-based</i> <i>p.15</i>	Broad external status (based on close personal ties to a prestigious individual or elite institution)	Hollywood actor who enjoys status inherited from a celebrity parent		<ul style="list-style-type: none"> • Organizational reputation among investors, customers, talent, etc. • Knowledge & information • Opportunities • Exchange partners 	<ul style="list-style-type: none"> • Sponsorship
<i>Former Universal</i> <i>p. 16</i>	Broad external status (based on previous exceptional task performance)	Senior academic with exceptional cumulative publication record who has maintained status but shifted to other scholarly activities		<ul style="list-style-type: none"> • Organizational reputation among investors, customers, talent, etc. • Knowledge & information • Opportunities • Exchange partners 	<ul style="list-style-type: none"> • Mentoring • Knowledge transfer & capability development • Shaping or work norms and practices • Sponsorship
<i>Networking</i> <i>p. 17</i>	Broad external status (based on exceptional network development and management capability)	Wireless communications professional with influence in industry's standards setting committee based on network position		<ul style="list-style-type: none"> • Organizational reputation among investors, customers, talent, etc. • Knowledge & information • Opportunities • Exchange partners • Novel networks 	<ul style="list-style-type: none"> • Mentoring (on network management skills) • Sponsorship