HOW DO ENTREPRENEURIAL FOUNDING TEAMS ALLOCATE TASK POSITIONS?

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How do founding team members allocate task positions when launching new ventures? Answering this question is important because prior work shows both that founding team members often have correlated expertise, thus making task position allocation problematic; and initial occupants of task positions exert a lingering effect on venture outcomes. We draw on status characteristics theory to derive predictions on how co-founders' specific expertise cues and diffuse status cues drive initial task position allocation. We also examine the performance consequences of mismatches between the task position and position occupant. Qualitative fieldwork, combined with a quasi-experimental simulation game and an experiment, provides causal tests of the conceptual framework. We find that co-founders whose diffuse status cues of gender (male), ethnicity (white), or achievement (occupational prestige or academic honors) indicated general ability were typical occupants of higher-ranked positions, such as chief executive officer role, within the founding team. In addition, specific expertise cues that indicated relevant ability predicted task position allocation. Founding teams created more financially valuable ventures when task position occupants' diffuse status cues were typical for the position; nonetheless position occupants with high diffuse status cues also appropriated more of the created value. Our results inform both entrepreneurship and status characteristics literature.

Many new business ventures are founded by teams of entrepreneurs rather than an individual, thus making the founding process a collective effort right from the start (Ruef, 2010). The prevalence and importance of team founding have fueled a rich body of literature, with many researchers considering team

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composition to be a crucial factor that helps explain why some new ventures outperform others. Reviewing this literature, Klotz, Hmieleski, Bradley, and Busenitz (2014) argue that new venture founding teams constitute a theoretically unique and meaningful setting to study teams—in contrast to top management teams of established firms or, say, project teams or virtual teams operating at lower levels within organizations. Extant literature on founding teams draws mainly from the upper echelon tradition (Hambrick & Mason, 1984) to examine how team attributes such as the mix of functional expertise, prior work experience (e.g., Beckman, Burton, & O'Reilly, 2007) and personal networks (e.g., Vissa & Chacar, 2009) influence internal team processes and, thereby, affect venture performance outcomes.

We identify two important theoretical gaps in this research on founding teams. The first gap is that much prior work on founding teams assumes the team already exists and is well structured and then proceeds to examine how expertise differences drive outcomes (see the recent review by Klotz et al., 2014). However, Ruef, Aldrich, and Carter (2003) show that founding teams are typically formed on the basis of factors such as social similarity or ecological

availability rather than expertise complementarity, which implies co-founders' expertise may often be highly correlated. Concurrently, Sine, Mitsuhashi, and Kirsch (2006) show that explicit formalization of task positions within founding teams is crucial for current performance; while Burton and Beckman (2007) provide evidence that the initial occupants of such task positions imprint the position and thereby affect future venture outcomes as well. These findings make for an important theoretical and practical puzzle. Specifically, given that building a new venture is a highly uncertain endeavor for the focal team (Blatt, 2009) and initial task position allocation can have significant downstream consequences, it is unclear how the co-founders, who typically possess correlated expertise, manage the initial task position allocation process. Further, although idiosyncratic task positions (Miner, 1987) can be created according to co-founders' distinctive characteristics, startup firms often do not have much room to deviate from some traditional task positions (e.g., chief executive officer [CEO], chief financial officer [CFO], chief operating officer [COO]), which must exist due to the accountability and legitimacy demanded by the broader institutional environment (Scott, 2001).

The second gap is prior work that conceptualizes founding teams as varying in task-relevant expertise—proxied by factors such as functional skills, industry experience, prior startup experience, network ties, or educational background. We label this as a *horizontal* dimension of expertise differences within founding teams. What is missing in this conceptualization is accounting for variation in status, which is conceptually distinct from task-relevant expertise. By status, we refer to an individual's publicly acknowledged social esteem and worth relative to others in a social hierarchy (Chen, Peterson, Phillips, Podolny, & Ridgeway, 2012). Contemporary anecdotal (and sometimes controversial) practitioner accounts from Silicon Valley suggest that such status differences might be an important factor in shaping founding teams' access to resources (e.g., CB Insights, 2010) and thus influences venture success. Yet, little

scholarly attention has been devoted to this *vertical* dimension of status differences within founding teams and how these differences manifest themselves in venture performance outcomes.

We therefore ask the question: Which co-founder initially occupies a particular formal task position in a founding team? We answer this question using the status characteristics theory perspective (Berger, Fisek, Norman, & Zelditch, 1977; Ridgeway, 1991) that allows us to examine how initial task position allocation is influenced by variation in founding teams' horizontal dimension of expertise differences as well as the vertical dimension of status differences. The intuition is because the relevant skills of a particular co-founder and its fit to the task at hand may not be directly observable, founding teams may need to rely on a variety of observable cues of varying diagnostic value to match team members to initial task positions.

We draw on status characteristics theory's notion of *specific expertise cues* and *diffuse status cues* to develop our framework. By specific expertise cue, we mean distinctive skills germane to the task at hand, such as directly relevant prior work experience. By diffuse status cues, we mean observable attributes such as personality traits, ethnicity, age, gender, or educational achievement that actors situated in a particular cultural and societal context treat as status markers that signify general ability and competence.

We then examine the performance consequences of the degree of fit between the task position and the occupant of that position in terms of those cues. We model venture-level performance consequences by invoking the concept of status conflict (Bendersky & Hays, 2012) to develop arguments on how position allocation makes status conflict more or less likely within the founding team and thus drives the financial performance outcomes of ventures. In addition, we model performance consequences for individual team members by examining how the typicality of position occupants, based on their diffuse status cues, drives attribution of their effort and competence by observers (Tajfel, Billig, Bundy, & Flament, 1971) and hence influences focal team members' financial performance outcomes.

We use a mixed methods approach to test our theoretical framework. We conducted qualitative fieldwork to first ground status characteristics theory in the novel context of role allocation in founding teams. However, for our quantitative analyses, founding teams in the field were less desirable testbeds as samples of naturally occurring founding

¹ A noisy debate was triggered by controversial Silicon Valley observer (of Indian-American heritage) Vivek Wadhwa's comment on CNN: "When I did raise venture capital, my buddies' advice to me was, they said, 'Get a white guy to be your front man.'... that's the way the system works here. You might as well understand it, and then use it to your advantage." Details can be found here: http://money.cnn.com/2011/10/27/technology/silicon_valley diversity/ (accessed October 28, 2011).

teams are subject to significant selectivity and suffer from a success bias (Ruef, 2010). Instead, we tested our conceptual framework quantitatively using a quasi-experimental and an experimental design. In Study 1, we follow the pioneering work of Chen, Katila, McDonald, and Eisenhardt (2010) and use a simulation game approach. More specifically, Study 1 utilizes data from founding teams assembled from an entrepreneurship simulation in an international business school's executive training and Master of Business Administration (MBA) curriculum. Participants, who had an average of 5.6 years of prior work experience, were randomly assigned into founding teams. In Study 2, we used a full experimental approach in a two × two design with a different sample of 181 subjects drawn from the same population. Our novel methodological approach trades off external generalizability against internal consistency by enabling us to more clearly observe the causal processes of task position allocation within the team and the consequent performance effects.

TASK POSITIONS IN FOUNDING TEAMS

When co-founders come together at the very beginning to build a new venture, an important choice they face is deciding how to structure the organization. Formalizing task positions is an important aspect of structuring new organizations, and this occurs through the documentation and allocation of task-roles (Pugh, Hickson, Hinings, & Turner, 1968). The concept of "role" represents abstract notions about categories of positions, what sorts of individuals ought to occupy those positions and the bundle of behaviors expected from (and anticipated by) individuals who occupy those positions (Callero, 1992; Winship & Mandel, 1983). In a particular instance, within a given organization, we observe only a specific manifestation of the abstract role in the form of a given task position.

There are two views on how organizational task positions might be constructed. The internal, idiosyncratic jobs view (Barley, 1990; Miner, 1987) asserts that positions are negotiated within an organization based on the specific local context and the idiosyncratic characteristics of the individuals involved. The implication is that the set of positions, tasks, and responsibilities that comprise a given position are idiosyncratic to specific organizations. Task positions are seen as the outcome of a negotiated order among local actors. This view suggests that co-founders have the freedom to craft distinctive

positions (for example the quirky position of Chief Yahoo Officer!) that reflect the idiosyncratic features of the co-founders involved.

However, creating distinctive task positions is not always feasible for newly founded firms; the external institutional view (Edelman, 1990; Tolbert & Zucker, 1983) explains why. Proponents of this view argue that the normative external environment exerts a powerful influence on internal organizational structures such that even new organizations often have little room to deviate from some key "traditional" task positions (e.g., CEO, chief marketing officer [CMO]) that need to exist to meet the legitimacy and accountability requirements demanded by the broader institutional environment (Scott, 2001). Indeed, in a specific new venture, there are often general functional roles (e.g., finance, operations, marketing, etc.) that are enacted as particular task positions (e.g., CFO, COO, CMO, etc.).

Following prior work (Burton & Beckman, 2007; Sine et al., 2006) we assume that formal task positions are exogenous to the co-founders. Further, we assume task positions can be arranged in a hierarchy such that some positions are seen as more important and powerful than others. Some co-founders take positions with greater responsibility while others in the same founding team may hold supportive positions (Aldrich & Ruef, 2006). For instance, co-founders that are also on the board of directors of their venture are seen as more powerful than the co-founders that are not.

Given these assumptions, we develop theory on which co-founders occupy particular formal task positions in the founding team. Unlike top management teams in established firms, task position allocation is challenging for co-founders due to several features of the new venture context. First, co-founders are often peers who come together to launch the venture and, therefore, lack the formal authority that managers in established firms use to design a work team (Reagans, Zuckerman, & McEvily, 2004). Second, Ruef et al.'s (2003) findings imply that co-founders tend to have correlated expertise; this renders task position allocation difficult because similarity of skill sets makes division of labor problematic. Third, unlike established firms,

² To foreshadow the methods, our Study 1's research design allowed us to pre-specify some task positions but also allowed for idiosyncratic positions to emerge and thus account for such emergent positions in the statistical analysis. However, our theorizing focuses only on how cofounders occupy pre-specified task positions.

new ventures operate in a highly uncertain and resource-starved context and hence are highly dependent (Pfeffer & Salancik, 1978) on external resource holders, whose approval and backing are critical for their success. Status characteristics theory (Berger et al., 1977) provides a useful theoretical foundation that allows us to conceptualize this process.

Status Characteristics Theory

Status characteristics theory (Berger et al., 1977; Wagner & Berger, 1993) describes how differences in actors' personal characteristics affect performance expectations and how these expectations subsequently drive influence within a task group. Through socialization in a broader culture, individuals learn to associate different personal characteristics with task-related competence or ability. The theory refers to personal characteristics that have become associated with task competence as a "status characteristic" (Berger, Ridgeway, & Rosenholtz, 1986; Ridgeway, 2001), and distinguishes between two types of characteristics (Berger, Rosenholtz, & Zelditch, 1980). Personal characteristics that are believed to be informative about an individual's expertise in a clearly defined and specifiable task are referred to as specific expertise cues. For example, prior work experience in marketing and sales is a positive specific expertise cue signaling perceived expertise for a CMO position for a specific new venture, yet not for a CFO position.

In contrast, personal characteristics that indicate general ability that is applicable to more than one task are referred to as diffuse status cues. Beliefs about ability differences associated with diffuse characteristics are context dependent because they originate from shared cultural values within the societal contexts in which the group is embedded. Scholars have noted that both an individual's personality traits as well as the social categories to which they belong can become diffuse status markers. Thus, studies in the United States show that organizational work group members with an extraverted personality are perceived as more competent and attributed with high diffuse status and, thus, are frequently selected for leadership positions in the group (e.g., Bendersky & Shah, 2013). Likewise, differences on ascribed social categories such as gender, age, race, and ethnicity have been shown to act as diffuse status cues (Berger & Zelditch, 1998). For example, Thomas-Hunt and Phillips (2004) provide evidence that work groups with female experts

perform worse than those with male experts because groups, regardless of their gender composition, judge women as less expert than men, causing them to exert less influence over the group task. In addition, differences on *achieved* social category attributes, such as educational attainment and occupation, have also been shown to act as diffuse status cues (Berger & Zelditch, 1998) that convey differential performance expectations.

A Status Characteristics Framework for Entrepreneurial Founding Teams

Status characteristics theory has been applied extensively in the context of work teams within established organizations (see Chen et al., 2012 for an overview). However, there is no prior research applying this framework to the context of entrepreneurial founding teams. Yet founding teams are a theoretically interesting setting in which to apply the status characteristics framework due to the greater agency accorded to co-founders of new ventures (as compared to employees of established organizations) and the "pattern matching" that influential external stakeholders use for resource allocation.³

Given the lack of prior research, we grounded the status characteristics framework to the entrepreneurship context through qualitative fieldwork with a convenience sample of six founding teams. Our semi-structured interviews (one to two hours duration each) with founding team members focused on understanding the motivations and triggers for task division within the team as well as the procedure followed for that division. From the raw textual data, we developed our theoretical interpretation in two steps. We first identified what might be the salient diffuse status and specific expertise cues in the context of these founding teams. We then focused on how these cues influenced the position allocation process. Our conceptual model is applicable to teams that are together from the start, as opposed to teams with sequential entry of founders.

³ For example, the *Wall Street Journal* reported legendary venture capitalist John Doerr (from Kleiner Perkins) as stating: "...the success factor that I've seen in the world's greatest entrepreneurs... they all seem to be white, male, nerds who've dropped out of Harvard or Stanford, and they absolutely have no social life. So when I see that pattern coming in—which was true of Google—it was very easy to decide to invest." See http://www.wsj.com/articles/SB121025688414577219 (accessed May 8, 2008).

Table 1 summarizes the interview data and our theoretical interpretation. Four suggestive patterns seem to emerge: (1) co-founders engage in division of labor and allocate task positions for both internal task coordination and external legitimacy reasons; (2) the attributes of individual founders that became salient during the task allocation process and hence served as diffuse status cues varied across our sample, depending on the idiosyncrasies of the founding team's composition. Specifically, we observed that ascribed attributes such as gender, ethnicity, and age as well as achieved attributes such as academic achievement and affiliation to prestigious organizations served as diffuse markers of ability; (3) there was overlap of specific expertise cues for some positions as well as missing specific expertise cues for other positions within the same founding team; and finally, (4) task position allocation seems to be guided by matching occupants to positions based on specific expertise as well as diffuse status cues.

These qualitative insights suggest that co-founders match with task positions based on noisy yet observable markers of ability. In short, co-founders form expectations of each other's contribution to the collective task of building the venture based on a variety of visible cues of varying noise levels which signal ability. Both specific expertise cues and diffuse status cues inform the performance expectations that co-founders develop for each other. When co-founders share high performance expectations for a particular team member, they tend to defer to that team member in making decisions and taking action because they believe that doing so will help the team accomplish their common goal. A founder's specific expertise causes other co-founders to form positive performance expectation of that focal founder and hence guides the team in assigning an individual team member to a particular task position relating to that expertise. As the example from the founding team A01 (from Table 1) suggests, specific expertise cues are a baseline predictor of allocation to task positions in founding teams. More formally:

Hypothesis 1. Ceteris paribus, the probability that person j will occupy a specific task position (i.e., CEO, CFO, CMO or COO) in his/her founding team will increase as person j's specific expertise cues signal expertise for that particular task position.

However, Ruef et al. (2003) imply that it is rarely the case that founding teams have exactly the right set of complementary expertise. Indeed, as Table 1 reveals, five out of six teams in our fieldwork sample had gaps in their specific expertise, making task position allocation problematic. Status characteristics theory predicts that in such cases, diffuse status cues may become important because of differential perceptions of general ability and competence associated with particular status characteristics. Scholars have shown that actors with low diffuse status cues are given fewer opportunities to perform and are expected to be less competent (Ridgeway & Correll, 2004). In contrast, actors with high diffuse status cues tend to be given more opportunities to perform and are expected to be more competent (Correll & Ridgeway, 2003).

These differential perceptions of general ability will lead founding teams to allocate members with high-diffuse status cues to those task positions where their greater general ability is seen as appropriate; since such an allocation is likely to improve the likelihood of the founding team meeting its task performance goals. Specifically, when task positions are hierarchically arranged, we expect an assortative matching between team members and task positions to occur in such a way that members whose diffuse status cues indicate general ability are more likely to occupy higher-ranked task positions. As the case of founding team E01 (from Table 1) suggests, diffuse status cues of ethnicity and gender could have subtle yet pervasive effects on role allocation.

Further, as Table 1 illustrates, diffuse status cues could originate from ascribed social categories (such as, say, ethnicity or gender) as well as achieved social categories (such as, say, educational achievement or affiliations to prestigious organizations). Irrespective of their type (ascribed or achieved diffuse status), our arguments suggest a baseline prediction on the relationship between diffuse status cues and the occupants of hierarchically ordered task positions in founding teams as given below⁴:

Hypothesis 2. Ceteris paribus, the probability that person j will occupy a higher-ranked task position in his/her founding team will increase as person j's diffuse status cues signal general ability.

⁴ To foreshadow the methods, in our empirical context, task positions were ranked in the following hierarchical order (from highest to lowest rank): (1) CEO; (2) CFO; (3) COO & CMO; (4) all other task positions. We also measured ascribed and achieved diffuse status cues separately.

 $TABLE \ 1$ Formal Task Position Allocation in Founding Teams from the Field $^{\rm a}$

				Ō	Our theoretical interpretation	tion
New venture background ^b	Founding team details	Trigger for position allocation	Stated position allocation process	Relevant diffuse status cues	Relevant specific expertise cues	The link between cues & task position allocation
game company) at work placel GEO—Mid 30s, w male, marketin, social game spe CPO—Mid 30s, A male, finance, s game specialist CTO—Mid 30s, w female, enginec management, s game specialist (Team members s initial equity st equally)	No. of founders = 3 [met at work place] CEO—Mid 30s, white male, marketing, social game specialist CPO—Mid 30s, Asian male, finance, social game specialist CTO—Mid 30s, white female, engineer/management, social game specialist (Team members split initial equity stakes equally)	"People first asked what each of us was doing and so we just needed titles. Right after we started the firm, we had an open discussion on titles and everyone was quite clear on what we would like to doWe had three titles: I was CEO and my cofounders were Chief Product Officer (CPO) and Chief Technology Officer (CTO). We did not create any funky titles but tried to stick to the traditional titles for both internal and external reasons. We needed to show we were a 'normal firm' as other firms outside."	"My (CEO) skill sets were more external facing, engaging people outside company raising money is most important for success. My personality suited CEO role the most. I am better than others at going out and talking to people For VC backed ventures, having a CEO who can manage external people like board members, investors etc. is crucialCPO role is very common in our industry—so we had it. CTO title is also now becoming common Jl has strong tech skill—so right choice for CTO yes some firms in our industry do have a tech person as CEO but deciding who became CEO depended on how you positioned CEO's role and the	Ascribed status cues: (1) Ethnicity (white vs. Asian) (2) Gender Personality traits: (1) Extraversion	For CEO role: None For CPO role: None For CTO role: Prior engineering experience	—Salient individual attributes that served as diffuse status cues in this founding team's context are: ethnicity, gender & personality. —Specific expertise cue was available only for the CTO position —Diffuse cues of ethnicity (white) & personality (extraversion) guide allocation to CEO role. —The CTO position allocation based on specific expertise.
E02 (Developing DNA sequence mapping and providing its	No. of founders = 2 [met at graduate school]	"We did not know why we needed titles but people simply asked	leadership." "I did not have confidence to do a business alone and	Achieved status cue: (1) Academic achievement	For CEO role: None	—The two founders are extremely homogenous in terms

TABLE 1 (Continued)

				0	Our theoretical interpretation	u
New venture background ^b	Founding team details	Trigger for position allocation	Stated position allocation process	Relevant diffuse status cues	Relevant specific expertise cues	The link between cues & task position allocation
library to academia and industry)	CEO—Late 20s, white male, PhD in Synthetic Biology with distinction CTO—Late 20s, white male, PhD in Synthetic Biology (Team members split initial equity stakes equally)	who is CEO?' When we first put things up on the website and started to meet people, they just wanted to know titles. It was an external facing exercise really, not internally motivated at allwe did not feel any reason to have titles First we needed CEO anyway and so we had it and the reason we had CTO title was just because RJ was doing more technological part at the time we decided titles."	my classmate RJ and I we both wanted to do our own business. In 2010 we started to develop the idea together and in 2012 was very natural division of tasks: RJ (CTO) had the more mathematics relevant task to develop algorithm and I (CEO) was more biology side at the time of deciding the roles."	(Distinction in graduate work)	For CTO role: Advanced academic training in synthetic biology	of demographics & educational / professional attributes. Academic achievement seems the only salient individual attributes that served as diffuse status cue in this context. —Academic achievement during graduate school reinforces credentials of the founder who occupies CEO position.
E03 (Online fashion store providing customer-designed clothes)	No. of founders = 3 [met at business school] CEO—Early 30s, white male, MBA, management consulting CTO—Early 30s, white male, MBA, IT specialist CMO—Early 30s, white male, MBA, management/finance (Team members split initial equity stakes equally)	we first us as	"We needed a good tech. person to execute our services and also to be able to tell our investor that we have the right person to do the job. LJ is a super IT person. He knows everything. We persuaded him to become CTOOJ and I are quite generalists. Neither of us had any experience in marketing or entrepreneurship before but we	Achieved status cue: (1) Prestige of prior firm affiliation (Booz)	For CEO role: None For CTO role: Prior IT experience For CMO role: None	—The only salient individual attribute that served as diffuse status cues in this context is the prestige of prior organizational affiliations. —Specific expertise cues were available only for the CTO position. —Diffuse cue of prior firm affiliation (Booz) reinforces credentials of the founder occupying CEO role.

TABLE 1 (Continued)

ion	The link between cues & task position allocation	—The CTO position allocation was based on specific expertise. —The remaining co- founder occupies CMO role.	—Salient individual attributes that served as diffuse status cues in this context are prestige of prior firm affiliations, age & personality. —CTO & CPO position allocation was based on specific expertise. —CEO position allocation driven more by achieved status cue (prior affiliation to BCG) & personality (extraversion). Thus founder who was older (in early 40s) & had prior start-up
Our theoretical interpretation	Relevant specific expertise cues		For CEO role: Prior start-up experience For CTO role: Prior engineering experience For CPO role: Prior product management experience Tor COO role: None
О	Relevant diffuse status cues		Achieved status cue: (1) Prestige of prior firm affiliation (BCG) Ascribed status cue: (1) Age Personality traits: (1) Extraversion
	Stated position allocation process	needed a CEO and a CMO. I mean, we are all similar as you see. We did our MBA together, we are all Europeans and we know the business In the end, MJ became CEO. He worked for Booze & company and for Shell as an internal consultant. He just finished his first pitch. It was great. We think that it went	"Strat." "We needed a CTO with strong engineering skill. GJhad it. He has a PhD in engineering. Luckily none of us has a very strong opinion so that we very naturally reached an agreement. We were happy to talk about these things and agreed that GJ would become CTO and I would become CTO and I was a bit more of a generalist I love talking to people and am good at that. I don't think that my work experience at
	Trigger for position allocation	and talked, and decided. It was quick."	"Of course because the four of us started the firm together, we are all co-founders. But that's not the title we use It was not that we needed to put some titles on our name cards but our investors directly asked. They would often ask 'who is CEO and who is CTO?" They wanted to know who was in charge of what. But you know not everyone can be CTO or CEO, so we really had to decide quickly."
	Founding team details		No. of founders = 4 [met at workplace] CEO—Early 30s, white male, product manager/consultant CTO—Early 30s, white male, engineer CPO—Early 30s, white male, product manager/marketing COO—Early 40s, white male, serial entrepreneur/angel investor (Team members split initial equity stakes equally)
	New venture background ^b		epplication for brain training)

TABLE 1 (Continued)

igger for oosition llocation	Trigger for position allocation
ve started the	A01 (Online and mobile No. of founders = 2 [met "When we started the game company] at workplace! firm we already had
estor with us	an investor with us.
arted the firm oig compared to	We started the firm quite big compared to
ventures, and d to have clear	otner ventures, and we had to have clear
or each of us.	tasks for each of us.
d to lead the nembers from	We had to lead the team members from
ry early stage.	the very early stage.
and other	games and other
rables happen.	deliverables happen.
th, story line	the tech, story line
esign team and	and design team and
o needed	we also needed
one to talk to	someone to talk to
ers, publishers sople abroad.	and people abroad.
eded the	We needed the
responsibilities to be	"oenoneihilitioe to be

TABLE 1 (Continued)

on	The link between cues & task position allocation	—Given similar specific expertise and homogeneity on other attributes, age seems to be the salient diffuse status cue that guides the older co-founder to occupy the CEO position.
Our theoretical interpretation	Relevant specific expertise cues	For CEO role: None For COO role: Prior experience in translation services For CMO role: None
J	Relevant diffuse status cues	Ascribed status cue: (1) Age
	Stated position allocation process	UniversityKK is now our vice president and CPO. He is in charge of developing HXL. He is the best person to know the game." "I have worked with KJ for 6 years and with MJ for 3 years. We all know each other well. We know what each person is good at and that's itI am the eldest and most mature. Talking to government especially needs maturity. We even did not discuss for long. Just naturally decided. That's it."
	Trigger for position allocation	divided very efficiently." "Somebody should have a name of CEO. We talk to clients every single day and need to show that we are a proper firm to make them trust us. We needed titles. CEO has to meet bank, major clients and government but at the same time someone should manage the office. We first day discussed to talk who will be CEO although we all invested equally."
	Founding team details	An of founders = 3 [met at workplace] CEO—Early 40s, Asian female, management in a major translation firm COO—Mid 30s, Asian female, management in a major translation firm CMO—Early 30s, Asian female, management in a major translation firm CMO—Early 30s, Asian female, management management in a major translation firm CMO—Early 30s, Asian female, management management in a major translation firm CMO—early 30s, Asian female, management will be CEO although a discussed to talk will be CEO although at we all invested equally)
	New venture background ^b	A02 (Providing translation / interpretation service to international events)

 a Co-founding team members in this sample were together from the start of their ventures (i.e., there was no sequential entry of founding team members). b E = Europe based venture; A = East Asia based venture.

Ranks of Position and Interaction Effects of Diffuse Status and Specific Expertise Cues

Thus far, we have argued the main effects of specific expertise and diffuse status cues on the likelihood of a co-founder occupying a particular task position. Founding team members may differ from one another in terms of specific expertise as well as diffuse status cues at the same time. This raises the issue of how specific and diffuse cues combine to generate performance expectations—since the cues can be combined to generate either consistent or inconsistent expectations for performance in a given task position. Below we develop arguments on the likely consequence when specific expertise and diffuse status cues of an individual team member reinforce one another to generate a consistent performance expectation.⁵

First, let us consider the case where the focal individual's diffuse status cue is high. This suggests that the individual is considered to have the general ability to perform well in a broad range of tasks and, more specifically, is well placed to occupy a hierarchically higher-ranked position such as the CEO position. When that same individual also has specific expertise cues that indicate specific skills and ability to perform well in that task position—for example, the individual concerned has prior experience as a CEO—the odds of that focal individual occupying the position of CEO increases.

Now, consider a situation where the focal individual's diffuse status cue is low. This suggests that the individual is considered to have less general ability to perform well in a broad range of tasks and, more specifically, is better placed to occupy a hierarchically lower ranked position such as, say, CMO. When that same individual also has specific expertise cues that signal ability to perform well in a lower-ranked task position—for example, the individual concerned has prior experience as a marketing manager—the odds of that focal individual occupying the CMO position increases.

In other words, when the diffuse status cue of a particular team member reinforces the specific expertise cues of that member, indicating germane skills for a particular task position, the odds of that focal individual occupying the particular position is increased. More formally:

Hypothesis 3. The effect of specific expertise cues on the allocation of a founding team member to a particular task position is stronger when the diffuse status cues of that team member are also congruent with that particular task position.

Team Functional Background Homogeneity as a Moderator

Salience of cues varies with the composition of the founding team. We argue that diffuse status cues will be more salient when the team is relatively homogeneous in the functional domains of prior work experience. Functional diversity refers to the distribution of team members across a range of relevant functional categories. Previous studies have mainly focused on the costs and benefits of a team's functional diversity (e.g., Bunderson & Sutcliffe, 2002), but have not examined the influence of functional diversity on task position allocation.

In this study, we examine the most commonly used notion of functional diversity—dominant functional diversity—which refers to the extent to which team members differ in the functional areas within which they have spent the greater part of their careers (Bunderson & Sutcliffe, 2002). When founding team members have a high degree of homogeneity in their dominant functional work experience prior to joining the start-up, the founding team has little variance in terms of specific expertise cues and hence pays attention to other observable cues to allocate task positions. Hence, founding members are more likely to utilize diffuse status cues in order to allocate individuals to task positions. Indeed, as the example of teams E02 or A02 (from Table 1) suggests, when team members all have the same expertise, diffuse cues (respectively, academic achievement and age in these teams) become salient. More formally:

Hypothesis 4. The effect of diffuse status cues on the allocation of founding team members to higher-ranked task positions is stronger when the homogeneity of prior functional backgrounds is high, compared to when it is low.

Thus far, we have outlined how co-founders occupy particular task positions based on their specific expertise as well as diffuse status cues. We now outline below the performance consequences of

⁵ We do not make a prediction for the situation in which specific and diffuse cues generate inconsistent performance expectations, because, assuming equal effect strength, the likely consequence would be a null effect on task position allocation.

these processes—both to the venture as well as the position occupant. In particular, we examine how the fit between occupants' and their task positions influences performance outcomes. Position-occupant fit can be conceptualized in terms of the horizontal dimension of occupants' specific expertise cues as well as the vertical dimension of occupants' diffuse status cues. The theoretically more novel question is how fit on the vertical dimension, between occupants' diffuse status cues and the task position, influences performance outcomes, which is what we turn to next.

PERFORMANCE CONSEQUENCES OF FIT BETWEEN TASK POSITION AND INITIAL OCCUPANT'S DIFFUSE STATUS CUES

Entrepreneurship scholars have demonstrated how new venture teams' demographic attributes, including completeness of skills (Roure & Keeley, 1990), functional diversity (Beckman et al., 2007), and external network ties (Vissa & Chacar, 2009), influence intra-group processes, such as task and relationship conflict (Jehn & Mannix, 2001) and thereby shape venture-level performance outcomes. In addition, Kotha and George (2012) provide evidence on how social ties within the early founding team influence the equity holding pattern and thus incentivize cooperation in the team.

However, the above research does not pay attention to the performance consequences of status conflict, defined as disputes over founding members' relative status positions in their team's hierarchy. Bendersky and Hays (2012) argue that although individuals may occupy task positions based on their individual attributes and behaviors, (hierarchical) status as a resource may be contested and negotiated such that contestation is less likely to occur when the social attributes of the occupant of a particular task position are congruent with widely shared expectations regarding the appropriate status characteristics for that position.

In other words, when an occupant of a task position is *typical* in terms of their diffuse status cues, there is likely to be less status conflict. For example, when a CEO task position is occupied by a member with high diffuse status cues (e.g., white male), less status conflict is likely since other team members will perceive that the occupant of the CEO position fits widely shared expectations on the appropriate characteristics of the occupant of a CEO position. On the other hand, when occupants are *atypical*—when, for example, a member with low diffuse status cues (e.g., an Asian female) occupies a hierarchically

higher task position (say the CEO position) while a member with high diffuse status cues (e.g., a white male) occupies a hierarchically lower task position (say COO or CMO)—status conflict processes are more likely to be set in motion, leading to contestation. This may, in turn, negatively affect group performance, because status conflict undermines information sharing within the group (Wittenbaum & Stasser, 1996) and makes it less likely that the founding team develops an effective transactive memory system (TMS) (Hollingshead, 2001). TMS refers to the cooperative division of labor for learning, remembering, and communicating relevant team knowledge, with a high TMS leading to positive team performance (Moreland, 1999). Given that the founding team is engaged in the novel task of building a new venture, absence of an effective TMS and lack of information sharing will lead to lower team performance outcomes.

Apart from status conflict within the team, another mechanism linking the typicality of occupants to venture performance outcomes is the legitimacy and resources bestowed by external stakeholders. When the founding team has typical occupants of task positions (e.g., a white male occupies the CEO position and an Asian female occupies the CMO position), key external stakeholders, such as investors or alliance partners, may perceive the founding team as more legitimate because of its proto-typicality (Lord & Maher, 1991) and, hence, a safer bet. They are thus more likely to provide resources to the focal venture. Conversely, when position occupants are atypical, the team might be perceived as violating widely shared societal norms and thus be less likely to attract resources from external stakeholders. In essence, we focus on the fit between occupants' diffuse status cues and broader societal conceptions as to who might be appropriate occupants. Both our lines of reasoning suggest the following hypothesis:

Hypothesis 5. Founding teams that have a greater fit between task positions and the diffuse status cues of the occupants of those positions create more valuable new ventures.

A wide variety of individual, team-level, and exogenous factors are likely to influence an individual founding team member's task performance. However, in this study, we focus on how the individual's diffuse status cues influence observers' attributions of that individual's task performance. The logic of our conceptual framework suggests that individuals in the founding team form performance expectations of other team members based on diffuse status cues

such as gender, ethnicity, or educational achievement. In essence, actors who score high on these diffuse status cues (i.e., respectively, white, male, Dean's lister) are perceived as being more competent than actors who score low on those cues (i.e., respectively, non-white, female, non-Dean's lister).

If these beliefs on performance expectations are held by actors in the situation, individuals who score low on these diffuse status cues must perform at higher levels than other individuals on the founding team who rate higher on these diffuse status cues in order to be judged as equally competent. Foschi's (1989) model of double standards introduced the notion of standards as a mechanism by which observers attribute performance outcomes to individuals' ability. The essential logic of the double standards mechanism is that observers use differential standards for attributing ability. When individuals with high diffuse status cues perform well at a task, it is consistent with expectations and hence less scrutinized. In contrast, when individuals with low diffuse status cues perform equally well at the same task, their performance is critically scrutinized, since such good performance was inconsistent with what was expected based on their diffuse status cues. Greater scrutiny, in turn, increases the odds that good luck (rather than the individual's ability) might be perceived as the causal driver of the good performance outcome of a low diffuse status occupant. Further, since individuals with high diffuse status cues are judged by a more lenient standard than are individuals with low diffuse status cues, poor performance by a high diffuse status occupant is more likely to be attributed to bad luck than to lack of ability. This suggests evaluations of individual members' contribution to the venture's performance would be systematically biased with high diffuse status cues individuals getting the benefit of the doubt. This implies, all else equal, actors with high diffuse status cues would appropriate a greater proportion of the value created by the founding team, relative to actors with low diffuse status cues within the same team. More formally:

Hypothesis 6. The higher the diffuse status cues of a focal team member, the greater the performance evaluation received by that focal member from other members of his/her founding team.

OVERVIEW OF THE STUDIES

We tested our predictions in two complementary studies that provide a causal test of our framework. Our first study is an experiential simulation comprising MBA participants randomly assigned into founding teams that run new ventures competing against each other in a consumer durable product market. We use this quasi-experimental set-up to examine how co-founders become initial occupants of task positions (our Hypothesis 1 to Hypothesis 4) and the performance consequences of those choices (our Hypothesis 5 and Hypothesis 6). Study 1 allows us to retain the realism of field settings while allowing for the randomization and universality of observation that enables a good causal test of our full model. To bolster the internal validity of our postulated task position allocation process, we also conduct an experiment (Study 2) where we manipulate specific expertise and diffuse status cues to isolate the precise causal mechanism behind the effect of these cues on initial task position allocation (our Hypothesis 1 to Hypothesis 3).

STUDY 1

Methods

Participants. Sigma is a longitudinal simulation, used in an entrepreneurship elective class at a major business school. Participants were randomly assigned into founding teams of the new ventures that constitute the simulated durable goods industry. The average new venture had a founding team comprised of 4.6 members and the number of ventures that constitute a Sigma industry range from 5 to 8. The final sample covers 16 industries (i.e., runs of the simulation), with a total of 86 ventures and 394 individual participants⁶ of whom 66% were white and 68% were male. The average participant was 30.2 years old with 5.6 years of prior work experience and a Graduate Management Admission Test (GMAT) score of 702. Participants enthusiastically lived the role as founding teams of their new ventures because the simulation was engaging and competitive and because their venture's simulation performance comprised a significant part of the course grade. The visibility, universality, and comprehensiveness of simulation data (Chen et al., 2010) enables us to reliably trace the venture-level financial impact of social processes such as task position allocation at the team member level.

⁶ The number of observations in our regression models were lower (n = 344) because of missing data for some variables.

Procedure. Participants ran ventures situated in a newly created consumer durable goods market category, located in a fictional economy—these features greatly increase the inherent uncertainty and novelty of the situation. Further, the high price elasticity of demand of durable goods markets implies that the founding teams' strategic decisions have a significant impact on industry demand and, hence, performance consequences. Ahead of time, participants read a user manual that outlined the basic contextual and technical aspects of the simulation. The simulation was an intense experience for participants, lasting about 35 hours over a five-day period, and required timely and deliberative decision-making by each venture in order to achieve business success.

The ventures constituting the Sigma industry started off with identical resources, only differing in the composition of their founding teams. The teams ran their ventures for seven decision periods, where each period corresponds to a quarter (three months) of calendar time. As the simulation progressed, ventures became increasingly differentiated from one another due to the different choices the teams made in terms of marketing, operations, R&D and raising fresh equity and debt, in a context of high uncertainty as well as variation in their performance outcomes. The ventures in the simulation could also form alliances and enter new product market segments based on their R&D efforts. In each decision round, the teams decided their venture's strategic and tactical moves and monitored those of their competitors through formal and informal information sources. For example, every quarter, the teams could purchase a market research report that provided somewhat noisy but unbiased data on competitive moves made in the previous quarter by all ventures, including pricing information, product introductions, and modifications, and other marketing mix elements, such as advertising, as well as the addition of production capacity.

Prior to playing the simulation, during their very first meeting lasting up to two hours, each founding team decided on how to organize themselves. Prior to this meeting, simulation administrators clearly specified the CEO and CFO as legal officers of the new venture with seats on the board of directors. Other positions were left to the discretion of the respective founding teams; with participants made aware that positions will be required in the areas of marketing and operations, though teams were also free to devise idiosyncratic positions, if needed, for their ventures. These instructions prime participants

on the following hierarchical ordering of task positions: (a) CEO, at the top of the hierarchy; (b) CFO; (c) CMO and COO; and (d) idiosyncratically constructed task positions clustered at the low end of the hierarchy. Qualitative data on the role allocation process for a sub-sample of founding teams suggested participants' prior work backgrounds as well as interests were taken into account by teams, in addition to the needs of the venture. Further, the position allocation process was not easy, often marked by debate and discussion, with voting where necessary. An illustrative quote captures these features: "We shared our previous backgrounds during introduction and then split roles in thinking of maximizing our benefit" and "...discussion and volunteering was based on where we worked and where each could add the most value but voting took place when the team was not sure on a role..." At the end of their first decision period, teams report the structures of their organizations, including the specific formal task position of individual founding team members.

As detailed below, we relied on information from this initial meeting and performance data from the simulation to construct our variables. We supplemented this information with data from the participants' CVs and primary data from the participants (90% response rate) to identify their network position, founding team dynamics, as well as anonymous 360-degree performance feedback within the team.

Dependent variables. To examine the drivers of task position allocation, we first coded a set of dummy variables for CEO position, CFO position, CMO position, COO position, and idiosyncratic position to respectively indicate which team member was occupying the position. These were used to test Hypothesis 1 and Hypothesis 3. Furthermore, to test Hypothesis 2 and Hypothesis 4, we constructed an ordered task position dependent variable to represent the rank ordering of positions. For this purpose, consistent with the initial priming, CEO position was coded as 4, CFO as 3, CMO or COO as 2, and the idiosyncratic task positions created by each founding team as 1.

In order to analyze the determinants of performance outcomes, we constructed two dependent variables measuring venture (Hypothesis 5) and individual (Hypothesis 6) performance. At the end of

⁷ None of the qualitative comments on position allocation mentioned diffuse status cues of ethnicity or gender—this is unsurprising given that voicing such sentiments would be politically incorrect at this institution.

the simulation, we measured venture performance as the equity value of the venture using discounted free cash flow techniques. The emergent nature of the Sigma simulation allows for equifinality in venture performance, with multiple pathways to venture success. The discounted free cash flow approach is hence a more appropriate measure of venture performance in our context because other metrics, such as, say, market share or return on assets, will be directionally biased depending on the particular business strategy being followed by a venture—for example, using quantity market share as a performance metric would unduly favor ventures following a low-cost strategy. We first calculated enterprise value by taking the last period balance sheet and income statement of each venture, treating them as representative of the business, rolling them forward to estimate free cash flows and then discounting the free cash flows to arrive at their present values.8 We deducted the book value of debt (adjusted for excess cash) from the enterprise value to arrive at the focal venture's value of equity. Finally, we normalized value of equity within an industry to arrive at our venture performance measure.9

Lastly, we measured individual performance as the focal founding team member's percentage share of the total founder's equity pool. We proceeded as follows: First, at the end of the simulation, but before final simulation results were announced, participants anonymously gave themselves and other members of the focal founding team a certain percentage of the ownership equity such that the total added up to 100% of the founders' pool of equity. A larger percentage share of equity received by a particular founding member indicates the superior contribution by that member toward the team's collective task of creating a financially valuable venture. Second, we averaged the percentages received by the focal team member after excluding selfratings. Finally, we standardized the averaged percentage by founding team size to obtain individual performance of the focal individual.

Independent variables. The central independent variables in our study are the specific expertise and diffuse status cues of individual team members, which were used to predict Hypothesis 1 through Hypothesis 4 and Hypothesis 6. Status characteristics theory assumes that the relevant competence cues used by actors to form performance expectations are context specific (Berger et al., 1977), thus making some markers more salient than others. We situated the simulation game in an unidentified industry located in a fictional country so as to prevent the priming of a specific industry experience or ethnicity as more relevant than others. Further, in practice, organizational task group members often differ from one another in terms of several competence markers simultaneously. To account for this, we followed the theory's attenuation effect principle (Correll & Ridgeway, 2003), which states that additional consistent information is subject to a declining marginal impact, in identifying how to combine the competence markers conveyed by multiple characteristics into a single cue. More specifically, we modified Bunderson's (2003) approach to compute a diffuse status/specific expertise cue as the multiplicative sum of its constitutive competence marker (CM) categories, as below:

$$Diffuse(or\ Specific)Cue = 1 - ((1-CM1)(1-CM2))$$

CM categories refer to socially significant attributes of a focal individual that other actors use to anticipate the quality of the focal individual's future task performance. In other words, CM categories are attributes (e.g., gender, occupation) for which there are widely held beliefs in the broader culture that associate greater competence with one state of the category (e.g., male, professional) than another (e.g., female, blue-collar worker). Since competence markers are context specific, we relied on qualitative interviews of previous participants of this simulation game as well as expert game administrators in this setting to identify the relevant CM categories that constitute the diffuse status and specific expertise cues for our study as well as their relative weights¹⁰ when combined to form diffuse status and specific expertise cues.

Diffuse status cue. We made a distinction between diffuse status cues that are ascribed (such as ethnicity or gender) and diffuse status cues that are

⁸ The simulation administrators conducted checks to confirm that participants complied with the strict rules on leaving behind a "going concern" at the end of the simulation, so these valuation estimates are unlikely to be vitiated by end-game effects.

⁹ Industry normalization is required since Sigma simulation outcomes are idiosyncratic and emergent, with some runs producing highly profitable industries and others less profitable ones.

¹⁰ In additional robustness tests (not reported here), we used a grid-search approach (Greene, 1993) to empirically estimate the relative weights of the status cues; this methodology yielded the same pattern of results.

achieved (such as educational or occupational achievement). Our qualitative interviews revealed that the relevant ascribed characteristics that serve as CMs in this setting were ethnicity and gender; both equally weighted. We, therefore, calculated *diffuse status cue (ascribed)* using the following weights for each CM category: $CM_1 = 0.5$ for an ethnic majority (i.e., European American) and = 0 for an ethnic minority (i.e., otherwise); and $CM_2 = 0.5$ for a male participant and = 0 for a female participant.

We computed diffuse status cue (achieved) following a similar procedure. For this computation, competence marker CM₁ measured whether the participants had significant academic performance attainment at the business school where this study was conducted ($CM_1 = 0.5$ for being on the dean's list and = 0 otherwise). Expertise value CM_2 measured whether the participants had worked at prestigious business organizations prior to joining the institution's MBA program ($CM_2 = 0.5$ for experience at a prestigious organization and = 0 otherwise). Using a career intelligence guide (Vault) that students perceive as authoritative, we coded the following as prestigious organizations: McKinsey & Company, Boston Consulting Group, Bain & Company, and Booz & Company; Goldman Sachs & Co., Morgan Stanley, Blackstone Group, and J.P. Morgan Investment Bank; and Coca-Cola Company, Sony Corporation, Nike Inc., Johnson & Johnson, and Google.¹¹

Specific expertise cue. Specific expertise cues carry cultural expectations of competence at a limited, well-defined range of tasks. Our qualitative interviews revealed that the relevant specific attributes serving as CM categories in our study context were: (a) prior work experience in the specific task position or (b) prior work experience in a very similar task; both equally weighted. In other words, CM category CM₁ represented whether or not the focal participant had prior experience in that specific task position; while CM₂ represented whether or not the focal participant's prior work experience included consulting, advising, or directly executing tasks similar to those required for the focal task position.

In particular, we calculated the *specific expertise* cue for each position using the following weights: $CM_1=0.5$ for actual prior experience in the respective position (CEO, CFO, CMO, or COO) and $CM_1=0$ for no prior experience in the position; and $CM_2=0.5$ for prior work experience relevant to the position (entrepreneurial experience for CEO, financial experience for CFO, marketing professional experience for CMO, and process or operations management experience for COO) and $CM_2=0$ for no prior relevant experience.

Fit on diffuse status cue. To test Hypothesis 5 on the drivers of venture performance, we measured the fit between the task position and the diffuse status cue of the position occupant, aggregated across all positions in the focal founding team. To construct this team fit on diffuse status cue, we first estimated an ordered logit model to predict the probability of each individual being assigned to one of the four hierarchically ranked positions (i.e., CEO, CFO, CMO/COO, and idiosyncratic position) as a function of his/her diffuse status cue. From the estimated coefficients, we inferred the (theoretical) probability of an individual being assigned to a particular position. Then, for each individual, we calculated their position deviance as 1 minus the predicted probability of being assigned to that position. 12 We then multiplied the position deviance by minus 1 to obtain the fit on diffuse status cue index, which is a fraction ranging from 0 to -1. When the index is closer to 0, it suggests that the occupant has a high fit on diffuse status cue for that position (i.e., a typical occupant of that position); in contrast, as the index inches toward -1, it suggests that the occupant has a low fit on diffuse status cue for that position (i.e., an atypical occupant of that position). Finally, we created team fit on diffuse status cue at the team level by averaging the index scores of the constituent team members.

Team functional diversity. Lastly, to test Hypothesis 4, we constructed a measure of team heterogeneity in functional background, as coded from individuals' CVs. We first adapted Beckman and Burton's (2008) approach by categorizing each participant's previous work experience (from most recent to third most recent) into one of five functional areas: sales/marketing, finance/accounting, science/

¹¹ In summary, diffuse status cue (ascribed) varied from a maximum of 0.75 for a European American male participant to a minimum of 0 for an Asian woman participant. Diffuse status cue (achieved) varied from a maximum of 0.75 for a participant who was on the dean's list and worked at a prestigious firm prior to the MBA program to a minimum of 0 for a non-dean's list participant with less prestigious work experience prior to enrolling in the MBA program.

¹² For example, if the predicted probability of an individual becoming CEO is 0.65 and the individual occupies the CEO position, then his deviance index will be 0.35. In contrast, if the predicted probability of an individual becoming CMO is 0.25 and the individual occupies the CMO position, then his deviance index will be 0.75.

engineering/operations, business development/strategic planning, and administrative support/general management. We then computed *team* functional diversity as the Blau index (Blau, 1977): $1 - \sum_{i=1}^{5} p_i^2$, where p_i equals the percentage of a team whose dominant functional background is in the *i*th functional area (values range from 0, which represents low diversity, to 1 for high diversity).

Control variables. Our analysis includes examining the drivers of position allocation, venture valuation, and individual team members' financial performance. As we outline below, for each of these analyses, we controlled for factors that might correlate with our theoretical variables as well as the dependent variable.

In models testing the position allocation process (our Hypothesis 1 to Hypothesis 4), we first control for individuals' innate intellectual capacity using their *GMAT score* as a proxy. We then control for individuals' prior work experience (in years) and prior simulation experience (coded as 1 if participated in any simulation game previously; 0, otherwise). Since our sample was drawn from student cohorts who participated in this study during the last academic period, some subjects may have had a history of friendships prior to this particular study that may vitiate our analysis, despite the random assignment of subjects to teams. To mitigate this risk, we measured individuals' position in friendship networks prior to the start of the simulation. Specifically, we controlled for participants' indegree centrality. measured as the number of others that reported the focal individual as a friend; this is a measure of popularity that is also correlated with the personality trait of agreeableness (Klein, Lim, Saltz, & Mayer, 2004). We then controlled, where relevant, for team size as well as the stock of specific expertise cues for the different task positions (stock of CEO specific cues, stock of CFO specific cues, stock of CMO specific cues, stock of COO specific cues) to account for the availability of specific expertise in each team.

For the analysis predicting venture valuation (Hypothesis 5), we first controlled for two venture level attributes that could influence valuation—the quantity market share of the venture and the working capital requirements at exit for the venture. We then accounted for several team level factors that might influence valuation. We measured variation in the breadth of functional skills available to the team calculated as team functional diversity. We also account for availability of all the required expertise within the team by estimating the completeness of skills in the team; team skill completeness is

measured as a proportion that indicates whether the team has skills in general management, marketing, finance, and operations. We then included *team fit on specific expertise cues* to control for the effect of having positions staffed with the "right" occupants in terms of their task expertise. We calculated team fit on specific expertise cue analogous to *team fit on diffuse status cues*. Finally, we account for innate intellectual capability in the team through *team GMAT score* calculated as the average of members' GMAT scores.

For our analysis on the determinants of individual team members' financial performance (Hypothesis 6), we controlled for the following. First we controlled for valuation of the venture at the end of the simulation. We then accounted for team level factors that might influence team members' performance by controlling for team functional diversity, team skill completeness and team fit on specific expertise cues. We also controlled for the following individual attributes: indegree centrality, GMAT score, prior work experience and intra-individual functional diversity—calculated analogous to team functional diversity but based on each individual's occupational history. Finally, we controlled for task position attributes by including an indicator variable to capture the task position occupied by the focal individual.

Analysis. We tested Hypothesis 1 and Hypothesis 3 using conditional logit regressions (conditioned by the founding team), as the dependent variable used in the analysis is dichotomous, indicating the position taken by a particular individual within a team. To test Hypothesis 2 and Hypothesis 4, we used an ordered logit regression approach (clustered by founding team) in order to examine the effect of team members' diffuse status cues influencing their occupying a hierarchically higher-ranked task position. Finally, we used ordinary least squares (OLS) regressions to test Hypothesis 5 and Hypothesis 6 as in these cases the dependent variables—respectively, venture and individual performance—are continuous measures.

Results

The correlation matrices are given in Tables 2a, 2b, and 2c. Table 2a shows the correlations among variables used in predicting Hypothesis 1– Hypothesis 4. Table 2b shows the correlations for the model used to test Hypothesis 5 and, lastly, Table 2c presents the correlations for the model used to test Hypothesis 6. Average variance inflation factors (VIFs) at 5.3 is less than the threshold for the variables in Table 2a and VIFs for Table 2b and 2c are

 ${\bf TABLE\ 2A} \\ {\bf Correlations\ for\ Task\ Position\ Allocation\ Variables^a}$

	Variable	Mean	as	1	2	ဗ	4	ıc	9	7	æ	6	10	11	12	13	14	15	16	17	18	19	20	21
1.	CEO position	0.22	0.41	1.00																				
2	Occupant CFO position	0.23	0.42	28	1.00																			
3.	CMO position	0.21	0.41	27	28	1.00																		
4	occupant COO position	0.22	0.41	28	29	28	1.00																	
5.	occupant Ordered task position	1.36	0.69	.50	.51	25	24	1.00																
9.	Specific cue for CEO	0.18	0.24	.01	90	.11	03	03	1.00															
7.	position Specific cue for CFO	0.15	0.23	90.–	.23	11	05	.12	47	1.00														
89	position Specific cue for CMO	0.20	0.24	01	90.–	.15	05	04	.92	45	1.00													
6	position Specific cue for COO	0.09	0.19	.03	11	03	90.	60.–	38	28	34	1.00												
10	position Diffuse our ascribed	0.54	7.0	28	13	1	1	14	5	00	- 03	10	00 1											
11	Diffuse cue_	0.13	0.24	14	.03	08	07	117	90.	.07	.04	06	.13	1.00										
	achieved																							
12.	GMAT score	700.95	36.95	.03	.10	09	03	.07	05	.03	05	.14	90.	.23	1.00	9								
13.	Prior work	29.6	2.11	10	05	04	cI.	12	03	90.	07	co.	07	T6	17	T.00								
14.	experience Simulation	0.38	0.49	.05	09	01	.14	.01	07	.07	08	.07	.02	02	01	00.	1.00							
15.	Indegree centrality	12.28	8.19	.05	08	03	.02	90'-	.07	.02	.07	01	00:	.04	03	.05	90.	1.00						
16.	Stock of CEO specific	0.10	0.13	00.	.01	00.	01	02	05	.10	03	02	08	05	05	.07	.10	01	1.00					
17.	cues Stock of CFO specific	0.14	0.13	.00	05	90.	.01	02	.13	09	.14	02	00.	04	05	.01	02	.02	.25	1.00				
18.	cues Stock of CMO	0.19	0.14	.01	.02	05	.01	.05	13	.12	13	.03	16	.04	03	03	.10	07	.31	10	1.00			
19.	specific cues Stock of COO specific	0.09	0.10	02	.05	.01	03	.02	.05	01	.04	01	.03	01	.05	01	07	80.	10	31	33	1.00		
ć	cues	C C	,	5	S	5	Š	S	8	Š	Š	ţ	ć	Š	Ĺ	Š	Š	Ļ	8	7	5	ç	9	
.07	diversity	00:0	0.10	1.01	00.	1.01	1.01	co.i	 10.	£0.	20.1	ò.	i.03	10.	en.	ť.	į. 1	co.	50. 1	Ŧ.	10:	eT.	T.00	
21.	Team size	4.61	0.58	05	04	05	04	16	03	05	05	.03	.01	01	.03	.05	08	02	24	30	32	90.	.04	1.00
																								I

 $^{\mathrm{a}}$ N=344; correlations above 0.11 (absolute value) are significant at the 0.05 level.

TABLE 2B Correlations for Venture Performance Variables^a

	Variables	Mean	SD	1	2	3	4	5	6	7	8
1.	Venture valuation	40644.77	7950.08	1.00							
2.	Team fit on diffuse status cues	-0.69	0.04	.07	1.00						
3.	Team GMAT score	700.76	19.18	13	.08	1.00					
4.	Team functional diversity	0.56	0.16	.15	09	.15	1.00				
5.	Team skill completeness	2.07	0.82	.04	01	.04	.48	1.00			
6.	Team fit on specific expertise cues	-0.76	0.05	.05	.22	.13	01	.11	1.00		
7.	Market share	.19	.05	.04	06	05	09	06	.09	1.00	
8.	Working capital	61135.92	17806.94	.22	.07	03	03	.04	.05	.21	1.00

 $^{^{\}rm a}$ N=86; correlations above 0.22 (absolute value) are significant at the 0.05 level.

less than 2.¹³ Overall, we conclude that multicollinearity for the theoretical variables is not a concern in this sample.

Effect of specific and diffuse cues on position allocation. Table 3 presents the results of the conditional logit analysis used to test our first prediction that specific expertise cues influence assignment of the positions of CEO, CFO, CMO, and COO. As can be seen from Model 1b of Panel A, the coefficient for specific cue for the CEO position is not significant, suggesting that specific expertise cues do not predict assignment to this position. Model 2b of Panel B shows that specific cue for the CFO position is positive and strongly significant, suggesting that specific expertise in finance strongly predicts which individual founding team member will take on the CFO position. Likewise, Model 3b of Panel C shows that specific cue for CMO position is positive and significant, suggesting that specific indicators of expertise in marketing make it more likely for that individual to be assigned to the CMO position within the founding team. However, Model 4b of Panel D shows that specific cue for COO position does not predict assignment to that task position. Overall, we conclude that we have partial support for Hypothesis 1—that specific expertise predicts position assignment.

Hypothesis 2 argues that high diffuse status cues, which signal ability in general, are more predictive of assignment to hierarchically higher-ranked task positions. Table 4 reports the results of the ordered logit analysis conducted to test this prediction. Diffuse status cues comprise both the ascribed status

markers of gender and ethnicity as well as the achieved status markers of being on the dean's list and having prior work experience at prestigious organizations. Since our results are stable across models, we interpret only Model 6 of Table 4, which reports results after including both ascribed and achieved status cues. As shown in Model 6, the coefficient of diffuse status cue (ascribed) is strongly positive and significant, suggesting that individuals with greater ascribed status are more likely to occupy higher-ranked positions. Likewise, the positive and significant coefficient for diffuse status cue (achieved) implies that individuals with greater achieved status are more likely to occupy higherranked positions. Taken together, this indicates strong support for Hypothesis 2, which posited that high-diffuse status cues predict assignment to hierarchically higher-ranked positions.

Our next prediction, Hypothesis 3, argued that the effect of specific expertise cue is stronger when diffuse status cues are also consistent with the task position. To test Hypothesis 3, we examine the interaction effect of specific and diffuse cues on allocation to CEO, CFO, CMO, and COO positions, which are reported in Models 1d, 2d, 3d and 4d of Table 3. As seen in Model 1d, diffuse status cue (ascribed) * by specific cue for CEO position is positive and significant, suggesting that ascribed diffuse status positively moderates the effect of specific expertise cues on the likelihood of occupying the CEO. Likewise as seen in Model 2d, diffuse status cue (ascribed) * specific cue for CFO position is positive and significant, suggesting that ascribed diffuse status positively moderates the effect of specific expertise cues on the likelihood of occupying the CFO position. In other words, when a focal cofounder with high-diffuse status cues (such as a white male) also has specific expertise for the higher-ranked positions of CEO or CFO, the focal

¹³ One of our control variables (GMAT score) had a VIF in excess of 10, but we include it in models reported here as we believe it to be a good proxy for innate ability. Our pattern of results remains the same even without this control.

TABLE 2C Correlations for Individual Member Performance Variables^a

	Variables	Mean	as	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15
1.	Options value (%)	21.75	2.58	1.00														
2.	Diffuse cue_ascribed	0.55	0.24	16	1.00													
3.	Diffuse cue_achieved	0.13	0.24	02	.15	1.00												
4	CEO position occupant	0.22	0.41	.02	.16	.13	1.00											
5.	CFO position occupant	0.23	0.42	.02	.10	.01	29	1.00										
9.	CMO position occupant	0.21	0.41	.01	17	90.–	28	28	1.00									
7.	COO position occupant	0.22	0.41	00.	09	90.–	28	28	27	1.00								
8.	GMAT score	701.94	37.47	04	.04	.23	80.	60.	09	03	1.00							
9.	Prior work experience	5.68	2.12	.03	07	21	10	08	04	.17	17	1.00						
10.	Intra-individual functional	0.18	0.24	05	.02	90.	.11	00.	04	.02	05	.07	1.00					
	diversity																	
11.	Indegree centrality	12.28	8.19	03	.03	.04	90.	07	07	.04	01	.07	07	1.00				
12.	Venture valuation	40699.53	8035.39	05	.04	.02	00.	00.	.02	.01	07	09	05	.02	1.00			
13.	Team functional diversity	0.56	0.16	.23	07	.04	00.	00.	01	01	90.	00.	13	.15	.15	1.00		
14.	Team skill completeness	2.07	0.82	60.	01	03	01	00.	00.	.01	.01	.04	04	.13	90'	.48	1.00	
15.	Fit on specific expertise cue	-0.77	0.07	.05	04	02	07	.08	60.	11	05	.03	.01	.07	04	90.	.11	1.00
																		I

N = 280; correlations above 0.13 (absolute value) are significant at the 0.05 level.

co-founder is more likely to occupy that position. In contrast, as seen in Model 3d, diffuse status cue (ascribed) * specific cue for CMO position is strongly negative and significant, suggesting that ascribed diffuse status negatively moderates the effect of specific expertise cues on the likelihood of occupying the CMO position—which is lower ranked compared to the CEO or CFO position. In other words, when a co-founder with a high specific expertise for the (lower-ranked) CMO position also has a low-diffuse status cue (e.g., Asian female), that cofounder is more likely to occupy the CMO position. However, we do not find a significant negative moderating effect of diffuse cue (ascribed) on specific cue for the lower-ranked COO position as seen in Model 4d. Finally, we do not find any support for an interaction effect of diffuse status cue (achieved) and specific expertise cues. However, interpretation of regression coefficients in non-linear models—such as the conditional logit analysis we performed—has to be done with caution since these can differ substantially across the sample. We followed procedures suggested by Greene (2010) to graph the interaction effects and Figure 1 reports adjusted predictions at representative values of ascribed cues and specific expertise cues, with other variables held at the mean levels, using the margins and marginsplot commands in Stata, assuming a linear prediction.¹⁴ Overall, we interpret this pattern of results as moderate support for our Hypothesis 3 prediction that specific expertise cue has a stronger effect on task position allocation when the member's ascribed status cue is congruent with that task position.

Our Hypothesis 4 predicts that diffuse-status cues are particularly important in allocation to higher-ranked positions in teams with little functional diversity. Model 3 and 5 of Table 4 provide a test of this prediction. As can be seen in Model 3, the interaction term team functional diversity * diffuse cue (ascribed) is negative and significant. This means, the positive effect of high diffuse cues (on ascribed status) is dampened in functionally diverse teams. Note that while we get the same pattern of results in the full model (Model 7 of Table 4), the interaction term is just beyond conventional levels of significance (p = 0.11). Again the graphical pattern of results is consistent

¹⁴ Note that estimation of adjusted predictions at representative values for conditional logit in Stata requires either a linear prediction or a zero fixed effects assumption. The zero fixed effects assumption yielded the same graphical pattern, albeit with wider confidence intervals.

Conditional Logit Analysis of Task Position Allocation within Founding Teams^{abc}

	Panel	A (DV: CEC	Panel A (DV: CEO = 1, Otherwise = 0)	ise = 0)	Pane	IB (DV: CFO	Panel B (DV: CFO = 1, Otherwise = 0)	; = 0)	Panel	C (DV: CMC	Panel C (DV: CMO = 1, Otherwise = 0)	ise = 0)	Panel	D (DV: COO :	Panel D (DV: $COO = 1$, Otherwise = 0)	(0 = 1
	1a	1b	10	1d	2a	2b	2c	2d	3a	3b	3c	Эд	4a	4b	4c	4d
GMAT score	-0.00	0.00	-0.00	-0.00	0.01**	0.01**	0.01*	0.01*	-0.01*	-0.01* (0.00)	-0.00	-0.01	-0.00	0.00	0.00	0.00
Prior work	-0.12*	-0.13*	-0.10	-0.10	-0.05	-0.06	-0.05	-0.03	-0.06	-0.06	-0.08	-0.09	0.18***	0.18***	0.17***	0.17***
experience	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.08)	(0.08)	(0.07)	(0.07)	(0.07)	(0.08)	(0.06)	(0.07)	(0.07)	(0.07)
Simulation	0.18	(0.28)	(0.29)	0.11	(0.30)	(0.31)	-0.64""	(0.32)	(0.29)	0.02	0.04	0.05	0.69	0.69""	(0.30)	(0.30)
Indegree	0.02	0.02	0.02	0.02	-0.02	-0.03*	-0.03	-0.02	-0.01	-0.02	-0.02	-0.02	0.01	0.01	0.01	0.01
centrality	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Stock of CEO					0.99	90.0	0.13	-0.01	0.07	0.46	0.41	0.51	-1.00	-1.00	-1.14	-1.10
specific					(2.16)	(2.25)	(2.29)	(2.31)	(2.12)	(2.15)	(2.19)	(2.29)	(2.17)	(2.17)	(2.18)	(2.18)
cues Steele of CEO	000	0	7	90 1					*		24.	ii c	0	00	n c	c c
stock of CrO	(3.10)	(3.18)	(3.25)	(3.25)					3.91	(2.61)	(2.68)	(2.77)	(2.36)	(3.02)	(3.14)	(3.18)
cnes																
Stock of CMO	0.00	5.04	9.18	8.64	2.75	-2.91	-2.38	-1.65					1.76	1.79	1.47	1.54
specific	(3.01)	(0.9)	(6.47)	(0.60)	(1.86)	(2.72)	(2.89)	(3.05)					(2.21)	(2.88)	(2.92)	(2.95)
cues Stock of COO	1 50	-1 48	-0 51	-0.74	**80	990	ر بر	168	2.08	-113	-1 26	00 0-				
specific	(3.58)	(3.60)	(3.69)	(3.67)	(3.00)	(3.68)	(3.74)	(3.83)	(2.72)	(3.26)	(3.31)	(3.29)				
cnes	(0:00)	(00:00)	(69:6)	(6:5)	(20.5)	(00:0)	(+ (:-))	(60:6)	î	(21.0)	(10:0)	(61				
Specific cue		1.55	2.38	-1.47												
for CEO		(1.58)	(1.69)	(2.96)												
position						1	1	4				÷				
Specific cue for CFO						2.60***	2.54***	(1.87)		1.31° (0.72)	1.30° (0.72)	3.58"" (1.34)				
position						(66:6)	(00:0)	(1.57)		(3.5)	(2::5)	(10.1)				
Specific cue														-0.02	0.10	0.67
for CMO														(0.94)	(96.0)	(2.03)
position																
Specific cue for COO																
position																
Diffuse cue			2.41***	1.48*			1.31**	0.31			-1.85***	-0.71			-1.12**	-1.08*
ascribed			(0.77)	(0.88)			(0.64)	(0.84)			(0.55)	(0.80)			(0.54)	(0.57)
_achieved			(0.58)	1.20			(0.62)	0.03			(0.56)	(0.99)			(0.64)	(0.72)
Diffuse cue			(20:0)	6.10*			(10:0)	4.90*			(2010)	-4.61**			(100)	-0.88
ascribed				(3.68)				(2.75)				(2.22)				(3.00)
* Specific																
cue ^a				69.0				2 7 4				7				0 0
achieved				(2.19)				(2.41)				(2.63)				(3.32)
* Specific				(61.5)				(11.7)				(60.3)				(35:5)
cue"	1	α	10	13	7	α	10	13	1	α	1	13	1-	α	10	12
$^{2}_{ m LR} \chi^{2}$	5.03	6.08	24.20***	27.35 ***	18.38**	28.58***	33.37***	37.29***	7.94	11.36*	24.97***	29.59***	15.36**	15.36*	20.11**	20.25*
Observations	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344

 $^a \ Specific \ cue \ for \ CEO \ position \ was \ used in \ Panel \ A; \ specific \ cue \ for \ CEO \ position \ was \ used in \ Panel \ B; \ specific \ cue \ for \ CMO \ position \ was \ used in \ Panel \ B.$ $p \ Specific \ used \ in \ Panel \ B.$ $p \ Specific \ used \ in \ Panel \ B.$ $p \ Specific \ used \ u$

with an interaction effect. However, we do not find the same negative interaction effect between functional diversity and diffuse cue (achieved). Overall, we interpret this pattern of results as partial support for Hypothesis 4. We now turn to testing our Hypothesis 5 and Hypothesis 6 predictions on the performance consequences of the fit between the task positions available within the founding team and the diffuse cues of the occupants of those task positions.

Performance consequences of fit between position and diffuse status cues of position occupant. Table 5 shows the results of the OLS regression conducted to examine the drivers of venture performance at the end of the simulation.

Model 2 shows the effect of the fit between the task position and the diffuse status cue of its occupant. As can be seen, team fit on diffuse status cues is positive and strongly significant (p < .05), suggesting that as task position occupants become more typical (in terms of their diffuse status cues) within a founding team, the financial performance of their venture improves. This suggests strong support for Hypothesis 5, which predicts that when the founding teams' task position occupants are typical (i.e., their diffuse status cues are congruent with expectations), performance of the venture is enhanced due to reduced status conflict. Thus, the typicality of position occupants in the venture team predicts greater value creation for the venture. In post-hoc analysis, we delved deeper into the underlying mechanisms. Specifically, we were interested in the notion that lower status conflict enhances information sharing and the development of an effective TMS within the team. Indeed, evidence from a smaller sub-sample 15 suggests that teams with high diffuse status occupants in higherranked positions (i.e., the CEO and CFO positions) have a more effective TMS (Lewis, 2003) within

Table 6 presents the results of the analysis conducted to test our last prediction, Hypothesis 6, which argues that team members with high diffuse status cues will appropriate more of the value created by their team. The dependent variable in this OLS analysis is the percentage of the option pool that the focal cofounder is given by the rest of his/her founding team at the end of the simulation. As seen in Model 2 of Table 6, diffuse cue (ascribed) and diffuse cue (achieved) are both positive and significant (p < .05 and p < .01, respectively), which implies strong support for Hypothesis 6 that members with high

diffuse status cues receive greater portions of the founders equity pool from other team members; in other words, they appropriate more of the value created by the team as a whole.

STUDY 2

Study 2 is a two (specific expertise cue) x two (diffuse status cue) between subjects experiment. We manipulated the specific expertise cues (prior experience as corporate entrepreneur vs. prior experience in marketing) as well as diffuse status cues (male vs. female) of two co-founders that the subject has to rate as being appropriate as the CEO or CMO of a new venture that the subject is ostensibly launching with two co-founders. With this design, we were able to isolate the causal effect of specific expertise and diffuse status cues on position allocation and thus test Hypothesis 1 through Hypothesis 3.

Methods

Participants. The data for Study 2 were collected in two sessions at two European business schools. Both sessions were conducted as an optional in-class survey to 80 MBA and 101 Master of Science (MSc) students, with six subjects failing the manipulation check. The final sample in this study thus included 175 individuals (41% females), with an average of 3.5 years of work experience, and 25% of which had prior entrepreneurial work experience. ¹⁶ Participants' gender or prior entrepreneurial experience did not significantly predict the dependent measure.

Experimental design and procedure. Our study design has two noteworthy features. First, subjects considered the fit of each co-founder to each of the two task positions (CEO and CMO) independent of the attributes of the other co-founders. This evaluation in absolute terms represents a conservative test of the effect of diffuse status cues on position allocation. Second, the design ensured that subjects did not realize that the purpose of the study was about gender as a cue. We outline our experimental procedure and design in more detail below.

Students taking entrepreneurship courses were invited to participate in a survey of "assessing the venture team". Subjects who volunteered for the exercise

¹⁵ Results available from authors upon request.

¹⁶ Overall, we found no significant difference in the response pattern of this subject group with prior entrepreneurial experience compared to the non-entrepreneur subject group. We thank an anonymous reviewer for this insight.

TABLE 4
Ordered Logit Analysis of Task Position Allocation within Founding Teams^{abc}

	1	2	3	4	5	6	7
Model]	DV: Ordered Ta	sk Position (CEC) > CFO > CMO/	COO > Other pos	sition) ^a
Variable							
Simulation	0.09	0.07	0.07	0.07	0.07	0.07	0.06
experience	(0.18)	(0.20)	(0.20)	(0.18)	(0.18)	(0.20)	(0.20)
GMAT score	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Prior work	-0.09*	-0.08	-0.08	-0.07	-0.07	-0.06	-0.06
experience	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
ndegree	-0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.00
centrality	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Гeam size	-0.41***	-0.41***	-0.41***	-0.42***	-0.42***	-0.42***	-0.42***
	(80.0)	(0.06)	(0.06)	(80.0)	(80.0)	(0.06)	(0.07)
Diffuse		1.57***	3.63***			1.49***	3.57***
cue _ ascribed		(0.37)	(1.15)			(0.38)	(1.29)
Diffuse				1.01**	1.57	0.83*	0.43
cue achieved				(0.42)	(1.55)	(0.42)	(1.74)
Геаm functional		-0.51*	1.38	-0.59***	-0.45	-0.49*	1.32
diversity		(0.29)	(1.08)	(0.23)	(0.47)	(0.28)	(1.07)
Геаm functional			-3.57*				-3.59
diversity * Diffuse cue ascribed			(1.95)				(2.22)
_ Геат functional					-0.97		0.66
diversity * Diffuse cue_ achieved					(2.68)		(3.07)
cut1	-2.12	-1.93	-0.84	-2.89	-2.79	-2.34	-1.29
Constant	(2.03)	(1.94)	(2.07)	(1.93)	(2.04)	(1.88)	(2.00)
cut2	0.09	0.35	1.46	-0.66	-0.56	-0.04	1.01
Constant	(2.03)	(1.93)	(2.06)	(1.93)	(2.04)	(1.87)	(2.00)
rut3	1.15	1.46	2.57	0.42	0.52	1.07	2.13
Constant	(2.03)	(1.93)	(2.07)	(1.94)	(2.04)	(1.88)	(2.00)
lf .	5	7	8	7	8	8	10
Nald χ^2	29.65***	70.74***	74.14***	39.20***	42.60***	68.76***	76.49***
Observations	344	344	344	344	344	344	344

^a CEO position occupants = 4; CFO position occupants = 3; CMO or COO position occupants = 2; Other idiosyncratic position occupants = 1.

received a packet of study materials. The experimenter provided a verbal overview of the study and gave instructions. The study required each participant to play the role of one of the three co-founders at BronzeStar, a London-based venture in a consumer durable sector, and asked them to answer questions about the venture team structure.

Following the instructions, subjects read the venture description. They learned that BronzeStar is in need of external financing to take the venture to the next stage of its evolution, and the three co-founders (which included the subject) needed to decide on a clear division of task responsibility for the different aspects of the business (i.e., position allocation). In the scenario, subjects were told that they themselves had agreed to take up the role of COO. Thus, the

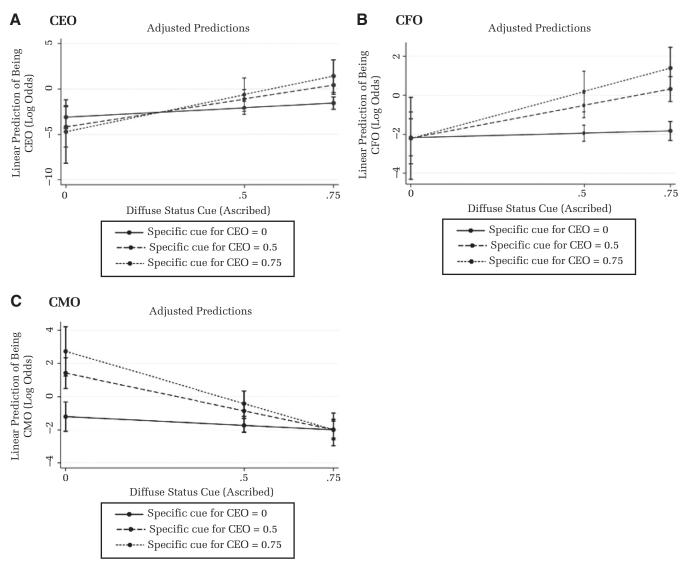
CEO and CMO positions were to be allocated between the two other founders. After reading the venture description, subjects faced the experimental manipulation of diffuse status cues and specific expertise cues in the two co-founders' profiles.

Subject's viewed the material in the following order: (1) details of the first founder's profile; (2) task position questions related to that first profile; (3) details of the second founder's profile; and (4) task position questions related to that second profile. Subjects were instructed to proceed in order and not navigate back to pages that were already filled in with their responses. This means that they answered position questions related to the first founder without knowing anything about the second founder. In our analysis, we considered only the answers related to the first founder. The second founder

^b Robust standard errors in parentheses.

c *** p < 0.01, ** p < 0.05, * p < 0.10.

FIGURE 1 Probability of Allocation to CEO, CFO, and CMO Positions at Representative Values of Specific Expertise Cue and Diffuse Status Cue (Ascribed)^a



^a All other predictors are held at their mean values.

was a mere filler profile designed to introduce competition for the positions between founders and to persuade subjects that the study was not focused on gender bias—since we balance co-founders to be of the same gender. Thus, our experimental manipulation was only applied to the first founder (test profile). Further, we asked subjects to separately rate the rightness of founder 1 being CEO and also of being CMO. Thus, subjects could consider a given founder as suitable for both positions, potentially making it harder for us to identify a causal effect of cues on task position allocation. Finally, subjects filled out a set of

"recollection" questions that included a manipulation check¹⁷ followed by a demographic background check.

Manipulation. Study 2 had a two (diffuse cue: high—male vs. low—female) x two (specific cue¹⁸:

¹⁷ Participants identified founder 1's (test profile) expertise and also gender at this stage.

¹⁸ A founder with entrepreneurship experience is considered to have a high specific cue for CEO but low for CMO. Likewise, a founder with marketing experience is considered to have a low specific cue for CEO but high for CMO.

 $\begin{array}{c} \text{TABLE 5} \\ \text{OLS Analysis of Venture Performance}^{\text{abc}} \end{array}$

	1	2
	DV: Ventur	e Valuation
Market share	1.90	2.24
	(2.00)	(1.89)
Working capital	0.02***	0.02***
-	(0.00)	(0.00)
Team GMAT score	0.03	0.00
	(0.13)	(0.01)
Team functional diversity	0.27	0.50
	(0.77)	(0.77)
Team skill completeness	0.00	0.02
	(0.01)	(0.13)
Team fit on specific expertise cues	-0.56	-1.36
	(2.16)	(2.13)
Team fit on diffuse status cues		4.31**
		(2.16)
Constant	-3.53	-0.94
	(5.04)	(5.51)
R^2	0.13	0.16
F statistic	3.19***	4.69***
Observations	86	86

^a The dependent variable is venture performance which is operationalized as the equity value of the venture, based on discounted free cash flows. Valuations are standardized within each Sigma industry.

high for CEO position—entrepreneurship experience vs. high for CMO position—marketing experience) between-subject design. First, to manipulate whether founder 1 (test profile) has high or low diffuse cue, we varied gender by using gender-typical names (e.g., Robert Johnson for the high diffuse cue vs. Julia Johnson for the low diffuse cue) and pronoun (e.g., he/his vs. she/her). To minimize the subjects guessing the nature of the manipulation, we did not make any explicit reference to gender (e.g., founder 1 is female); rather we used names and pronouns when describing demographic, educational, and professional backgrounds in a profile.

In each of the two conditions, we again manipulated whether founder 1 has a high specific cue for the CEO position or high specific cue for the CMO position. We did this by varying the founders' professional work experience prior to the launch of BronzeStar. In the high specific cue for the CEO position condition, we emphasized that founder 1 was a corporate entrepreneur, skilled in business development at a reputable home furnishing company located in the south-west area of the United States. In the high specific cue for the CMO position

TABLE 6
OLS Analysis of Individual Founding Team Member's
Performance^{acde}

	1	2
	DV: Opt	ion Pool
CEO position occupants ^b	0.84***	0.74***
	(0.14)	(0.14)
CFO position occupants ^b	0.40***	0.33**
	(0.14)	(0.14)
COO position occupants ^b	0.26*	0.23*
-	(0.14)	(0.13)
GMAT score	0.01***	0.00***
	(0.00)	(0.00)
Prior work experience	-0.07***	-0.06**
•	(0.02)	(0.02)
Intra-individual functional	0.20	0.17
diversity	(0.20)	(0.20)
Indegree centrality	0.01	0.01
3	(0.01)	(0.01)
Venture valuation	0.03	0.05
	(0.05)	(0.05)
Team functional diversity	0.38	0.40
,	(0.44)	(0.43)
Team skill completeness	0.01	0.02
	(0.06)	(0.06)
Fit on specific expertise cues	0.98	1.11
	(0.68)	(0.69)
Diffuse cue ascribed	(5.55)	0.48**
		(0.19)
Diffuse cue achieved		0.58***
Diffuse oue_uemeveu		(0.20)
Constant	-2.87***	-2.67**
Constant	(1.07)	(1.07)
R^2	0.24	0.29
F statistic	7.77***	8.16***
Observations ^c	280	280

^a The dependent variable is the standardized percentage of equity. This is computed based on the percentage of the founding team's equity that is anonymously allocated to the focal member by other members of the founding team.

condition, we emphasized that founder 1 was a marketer with rich marketing skills who worked for a reputable home furnishing company located in the south-west area of the United States. Otherwise, founder 1's profiles across all conditions were equivalent with respect to educational background, age, regional background, and rank in the previous job. The profile descriptions also featured the same word count.

^b Robust standard errors in parentheses.

 $^{^{}c}$ *** p < 0.01, ** p < 0.05, * p < 0.10.

^b Dummy variables to denote the task position occupied by the individual team member.

^c We excluded members with idiosyncratic positions since it is not feasible to identify specific expertise cues for such idiosyncratic positions.

^d Robust standard errors in parentheses.

 $^{^{}e}$ *** p < 0.01, ** p < 0.05, * p < 0.10.

Measures. Our experimental study specifically tests Hypothesis 1 to Hypothesis 3. We expect to show the following. Subjects will be more likely to allocate CEO and CMO positions when a co-founder has relevant expertise-i.e., entrepreneurship and marketing experiences, respectively (Hypothesis 1). Subjects will be more likely to allocate hierarchically higher-ranked positions (CEO) to a male than female co-founder and conversely lower ranked positions (CMO) to a female than male co-founder (Hypothesis 2). Next, we predicted the existence of an interaction effect between gender and expertise in the allocation of such positions. We expect subjects will be more likely to allocate the CEO position to a male co-founder than to a female cofounder, particularly when s/he has prior entrepreneurship experience. Likewise, we expect subjects will be more likely to allocate the CMO position to a female co-founder than to a male co-founder, particularly when s/he has prior marketing experience (Hypothesis 3).

To test these hypotheses we asked subjects to indicate their belief on the extent to which founder 1 should be CEO (CEO score) and CMO (CMO score) by completing two separate items ("To what extent do you believe that Robert (Julia) has to be CEO of your venture BronzeStar?"; "To what extent do you believe that Robert (Julia) has to be CMO of your venture BronzeStar?") on a 7-point scale (1 = not at all, 7 = very much).

Results

Each of the CEO and CMO scores was separately submitted to a two (diffuse cue: male = 0 vs. female = 1) x two (specific cue: entrepreneurship experience = 0 vs. marketing experience = 1) analysis of variance (ANOVA). The results of this analysis are presented in Figures 2A and 2B, after controlling for subjects' gender, previous experience as entrepreneurs, and enrolment in the MBA vs. MSc program.

To test Hypothesis 1, we began by comparing both CEO and CMO scores across the two specific expertise cue conditions. There was a significant main effect of specific cue such that a founder with entrepreneurship experience is more likely to be seen as CEO (M = 4.80, SD = 1.24) than a founder with marketing experience (M = 3.74, SD = 1.48), F = 26.18, p = 0.00. Similarly, a founder with entrepreneurship experience is less likely to be seen as CMO (M = 3.51, SD = 1.35) than a founder with marketing experience (M = 5.01, SD = 1.15), F = 6.73, P = 0.00. To test Hypothesis 2, we then compared both CEO and CMO scores across the two diffuse cue conditions. There was a significant main effect of gender such that a male founder is more

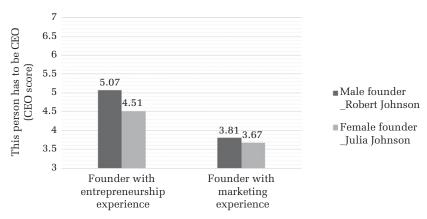
likely to be seen as CEO (M=4.45, SD=1.38) than a female founder (M=4.07, SD=1.53), F=3.62, p=0.06. Similarly, a male founder is less likely to be seen as CMO (M=3.99, SD=1.47) than a female founder (M=4.56, SD=1.40), F=8.22, p=0.01. In sum, we find strong support for Hypothesis 1 and Hypothesis 2.

Next, we studied the interaction effect between specific cue and diffuse cue to test Hypothesis 3. To examine the nature of this interaction, we compared the gender difference within the relevant specific cue condition for the CEO and CMO positions. For the CEO position allocation, in the entrepreneurship experience condition, the CEO score for a male founder (M = 5.07, SD = 0.99) was greater than the score for a female founder (M = 4.51, SD = 1.44), F = 3.45,p = 0.06. In other words, subjects were more likely to allocate a male co-founder rather than a female co-founder to the CEO position, particularly when s/he also has prior entrepreneurship experience. For the CMO position allocation, in the marketing experience condition, the CMO score for a male founder (M = 4.63, SD = 1.11) was significantly lower than the score for a female founder (M = 5.37,SD = 1.08), F = 7.90, p = 0.01. In other words, subjects were more likely to allocate a female cofounder rather than a male co-founder to the CMO position, particularly when s/he also has prior marketing experience. Overall, this pattern of results strongly supports Hypothesis 3. In summary, the Study 2 findings support our conceptual model on position allocation.

DISCUSSION AND CONCLUSION

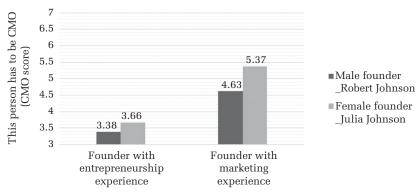
New ventures are often created by teams of founders who come together from the start to launch their businesses. Extant literature on founding teams draws mainly from the upper echelon tradition (Hambrick & Mason, 1984) to examine the consequences of variation in task relevant expertise within the team—proxied by factors such as functional skills, industry experience, prior start-up experience, network ties, or educational background (Klotz et al., 2014). This focus on the horizontal dimension of expertise differences within founding teams has limited our understanding of the consequences of ex-ante status differences in the team. We use a status characteristics framework to explore how the horizontal dimension of specific expertise as well as the vertical dimension of diffuse status cues jointly influence the matching of co-founders to particular formal task positions within the team as well as the performance consequences of this formal structure. The premise of

FIGURE 2A Analysis of Variance of CEO Position Allocation^{abc}



^a Male = 0; female = 1.

FIGURE 2B Analysis of Variance of CMO Position Allocation^{abc}



^a Male = 0; female = 1.

our conceptual framework is that co-founders' specific expertise and diffuse status cues serve as signals of varying diagnostic value that facilitate task position allocation. We first grounded our framework through qualitative field-work and then tested our predictions using quantitative analysis with data from two studies: our main study (Study 1) was a quasi-experimental simulation, while our supplementary study (Study 2) was a two x two experimental design—both with postgraduate student subjects.

Task Position Allocation in Founding Teams

We find consistent support across both studies for our conceptual model on position allocation, which we summarize as follows. We found evidence that both specific expertise and diffuse status cues are used to allocate individual team members to particular hierarchically ranked task positions. We observed that founding members whose specific expertise cues indicated expertise for a particular position were more likely to occupy that position. Diffuse status cues indicating general ability were significant predictors of who would occupy higher-ranked task positions in founding teams. In addition, we found interaction effects. A co-founder is more likely to occupy a task position when both specific expertise cues and diffuse status cues generate consistent expectations for that position; likewise, functionally homogenous teams

^b Entrepreneurship experience = 0; marketing experience = 1.

^c CEO score is measured on 1–7 scales. For presentation clarity, the y-axis on Figure 2A begins at 3.

^b Entrepreneurship experience = 0; marketing experience = 1.

^c CMO score is measured on 1–7 scales. For presentation clarity, the y-axis on Figure 2B begins at 3.

rely more on diffuse status cues for task position allocation.

Examining the drivers of task position allocation in founding teams is interesting and important because prior work shows both that founding team members often have correlated expertise (Ruef et al., 2003), thus making initial task position allocation non-trivial, and initial occupants of task positions exert a lingering effect on venture outcomes (Burton & Beckman, 2007; Sine et al., 2006). The above sets of findings lead us to the theoretically and practically important puzzle of exactly how founding teams assign initial task positions and how this process might influence performance outcomes. We address this significant gap by empirically testing, for the first time in the literature, the causal effects of the backgrounds and characteristics of founding team members on initial position allocation. In doing so, we re-conceptualize founding teams as simultaneously varying in the horizontal dimension of ex-ante specific expertise differences, which has been the focus of much prior research, as well as the vertical dimension of ex-ante status differences, which is our novel contribution to the literature on founding teams.

More broadly, a large volume of literature on new venture teams has examined how team members' composition, internal team processes, and teams' cognitive/affective states influence venture performance outcomes. Klotz et al. (2014) comprehensively reviewed this literature and found that much research has focused on how new venture team inputs, which are thought of as compositional features of teams, influence venture outcomes through intervening team processes. Thus, new venture team scholars have noted that factors such as prior experience (e.g., Amason, Shrader, & Tompson, 2006), functional diversity within the team (e.g., Beckman et al., 2007), educational prestige of founders (Beckman, 2006), and the personal networks of team members (Vissa & Chacar, 2009) are associated with venture performance outcomes.

The underlying mechanism in many of these studies is that the compositional variable in question (e.g., specific functional skills or network ties) provides informational benefits that improve team decision-making, which leads to superior performance. In the language of this paper, this prior work has focused on how variation in the *horizontal* dimension of specific expertise influences venture outcomes. We contribute to this literature by accounting for status differences, which are conceptually distinct from expertise differences, and unpacking how this *vertical* dimension of status differences between otherwise

peer co-founders influences a variety of team and individual outcomes. Klotz et al. (2014) point out that cumulative research on the relationship between teams' functional skills and venture outcomes is inconclusive. Our findings imply that one reason for these inconclusive findings could be the conflation in prior research of this vertical dimension of status differences with the horizontal dimension of expertise differences in founding teams.

Performance Consequences of Typicality of Position Occupants

We also examine the impact of task position allocation on subsequent venture performance as well as individual performance outcomes. We find evidence for a fit argument whereby when task position occupants in a team are *typical* in terms of their diffuse status cues, the team as a whole is able to create a more financially valuable venture. Yet, within a focal founding team, it is members with high diffuse status cues that appropriate more of the created value, as measured by the anonymous performance evaluation by other team members.

Our findings suggest that teams with typical position occupants create more valuable ventures, in part, because such teams experience lower levels of status conflict and, therefore, improved information sharing within the team. When founding members do not occupy the "right" hierarchically ordered positions that their diffuse status cues would suggest, the venture has problems creating value. This is true even when team members utilize their directly germane expertise correctly by occupying task positions consistent with their specific expertise cues. This is striking. Evidence from a smaller sub-sample suggests that teams with typical task position occupants-in other words, high diffuse status occupants in high-ranked roles (CEO and CFO) and low diffuse status occupants in low-ranked roles (CMO and COO)—are better at establishing an effective TMS within the team. An effective TMS, in turn, facilitates better decision-making and, hence, value creation. In short, focusing on the typicality (in terms of their diffuse status cues) of the initial occupants of positions provided us with the insight that one pathway to improved venture performance is to match cofounders to hierarchically ranked task positions based on their diffuse status cues because it reduces dysfunctional status conflict. These findings are consistent with research in established organizations that argues status and power hierarchies might be beneficial under some conditions since they serve to reduce conflict (Bunderson & Reagans, 2011).

Our results also add to the position imprinting literature. Burton and Beckman (2007) provide persuasive evidence that when the initial occupant of a task position is atypical in terms of task relevant expertise (i.e., specific expertise cues in the language of this paper), the subsequent occupant of that position experiences quicker turnover. The results of our study suggest that the notion of position imprints can be broadened to include typicality of the initial position occupant on task relevant expertise as well as on diffuse status cues. A straightforward implication is typicality of the diffuse status cues of initial position occupants has a lingering influence on subsequent stratification (by diffuse status cues) in the organization due to differential turnover of subsequent position occupants as predicted by the theory of position imprinting.

Future Research Direction

By re-conceptualizing founding teams using a status characteristics theory lens and focusing on a novel yet important outcome—initial task role allocation and its ramifications—our findings suggest several avenues for future research. First, while our research design enabled us to draw strong causal inferences, the external validity of our findings needs to be established by large-sample studies of founding teams in field settings from a variety of backgrounds and not just those with a Master's in business education. Second, our finding that diffuse status cues play an important part in determining initial occupants of task positions coupled with the notion that the task requirements in new ventures often change dramatically due to uncertainty implies that re-allocation of task positions might be an important outcome to examine in founding teams. The causes of task position reallocation and whether it is coupled with entry or exit of founding members might shed important new light on the micro-foundations of organizational inertia (Hannan & Freeman, 1984). Third, conceptualizing the extent to which formal titles convey information about specific task cues as opposed to more diffuse status cues might be a useful next step. In summary, examining both the horizontal dimension of specific expertise cues and the vertical dimension of diffuse status cues will help generate fresh insight into how founding teams are internally structured as well as externally evaluated by key stakeholders and how this influences venture performance outcomes. This study takes the first step in that direction.

REFERENCES

- Aldrich, H. E., & Ruef, M. 2006. *Organizations evolving* (2nd ed.). London: Sage Publications.
- Amason, A. C., Shrader, R. C., & Tompson, G. H. 2006. Newness and novelty: Relating top management team composition to new venture performance. *Journal of Business Venturing*, 21: 125–148.
- Barley, S. P. 1990. The alignment of technology and structure through roles and networks. *Administrative Science Quarterly*, 35: 61–103.
- Beckman, C. M. 2006. The influence of founding team company affiliations on firm behavior. *Academy of Management Journal*, 49: 741–758.
- Beckman, C. M., & Burton, M. D. 2008. Founding the future: Path dependence in the evolution of top management teams from founding to IPO. *Organization Science*, 19: 3–24.
- Beckman, C. M., Burton, M. D., & O'Reilly, C. A. I. I. I. 2007.
 Early teams: The impact of team demography on VC financing and going public. *Journal of Business Venturing*, 22: 147–173.
- Bendersky, C., & Hays, N. A. 2012. Status conflict in groups. *Organization Science*, 23: 323–334.
- Bendersky, C., & Shah, N. 2013. The downfall of extraverts and rise of neurotics: The dynamic process of status allocation in task groups. *Academy of Management Journal*, 56: 387–406.
- Berger, J., Rosenholtz, S. J., & Zelditch, M. 1980. Status organizing processes. *Annual Review of Sociology*, 6: 479–508.
- Berger, J., & Zelditch, M. 1998. Status, power, and legitimacy: Strategies and theories. New Brunswick, NJ: Transaction.
- Berger, J. M., Fisek, H., Norman, R. Z., & Zelditch, M., Jr. 1977. *Status characteristics and social interaction*. New York, NY: Elsevier.
- Berger, J. M., Ridgeway, C., & Rosenholtz, S. J. 1986. Status cues, expectations, and behavior. In E. Lawler (Ed.), *Advances in group processes*, vol. 3: 1–22. Greenwich, CT: JAI Press.
- Blatt, R. 2009. Tough love: How communal schemas and contracting practices build relational capital in entrepreneurial teams. *Academy of Management Review*, 34: 533–551.
- Blau, P. M. 1977. *Inequality and heterogeneity: A primitive theory of social structure*. New York, NY: Free Press.
- Bunderson, J. S. 2003. Recognising 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.

- Bunderson, J. S., & Sutcliffe, K. M. 2002. Comparing alternative conceptualizations of functional diversity in management teams: Process and performance effects. *Academy of Management Journal*, 45: 875–893.
- Burton, M. D., & Beckman, C. M. 2007. Leaving a legacy: Position imprints and successor turnover in young firms. *American Sociological Review*, 72: 239–266.
- Callero, P. L. 1992. The meaning of self-in-role: A modified measure of role-identity. Social Forces, 71: 485–501.
- CB Insights, 2010. Venture capital human capital report, Jan–June 2010.
- Chen, E. R., Katila, R., Mcdonald, R., & Eisenhardt, K. M. 2010. Life in the fast lane: Origins of competitive interaction in new vs. established markets. *Strategic Management Journal*, 3: 1527–1547.
- Chen, Y.-R., Peterson, R., Phillips, D., Podolny, J., & Ridgeway, C. 2012. Bringing "status" to the table: Attaining, maintaining, and experiencing status in organizations and markets. *Organization Science*, 23: 299–307.
- Correll, S. J., & Ridgeway, C. L. 2003. Expectation states theory. In J. Delamater (Ed.), The handbook of social psychology: 29–51. New York, NY: Kluwer Academic Press.
- Edelman, L. 1990. Legal environments and organizational governance: The expansion of due process in the American workplace. *American Journal of Sociology*, 95: 1401–1440.
- Foschi, M. 1989. Status characteristics, standards and attributions. In J. Berger, M. Zelditch & B. Anderson (Eds.), Sociological theories in progress: 58–72. Newbury Park, CA: Sage.
- Greene, W. 1993. *Econometric Analysis* (2nd ed.). New York, NY: Macmillan.
- Greene, W. 2010. Testing hypotheses about interaction terms in nonlinear models. *Economics Letters*, 107: 291–296.
- Hambrick, D., & Mason, P. 1984. Upper echelons: The organization as a reflection of its top managers. Academy of Management Review, 9: 193–206.
- Hannan, M. T., & Freeman, J. 1984. Structural inertial and organizational change. American Sociological Review, 49: 149–164.
- Hollingshead, A. B. 2001. Cognitive interdependence and convergent expectations in transactive memory. *Journal of Personality and Social Psychology*, 81: 1080–1089.
- Jehn, K. A., & Mannix, E. A. 2001. The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. Academy of Management Journal, 44: 238–251.
- Klein, K., Lim, B. C., Saltz, J. L., & Mayer, D. M. 2004. How do they get there? An examination of the antecedents

- of network centrality in team networks. *Academy of Management Journal*, 47: 925–963.
- Klotz, A. C., Hmieleski, K. M., Bradley, K. M., & Busenitz, L. W. 2014. New venture teams: A review of the literature and roadmap for future research. *Journal of Management*, 40: 226–255.
- Kotha, R., & George, G. 2012. Friends, family, or fools: Entrepreneur experience and its implications for equity distribution and resource mobilization. *Journal of Business Venturing*, 27: 525–543.
- Lewis, K. 2003. Measuring transactive memory systems in the field: Scale development and validation. *The Journal of Applied Psychology*, 88: 587–604.
- Lord, R. G., & Maher, K. J. 1991. Leadership and information processing: Linking perceptions to performance. Boston: Unwin Hyman.
- Miner, A. S. 1987. Idiosyncratic jobs in formalized organizations. *Administrative Science Quarterly*, 32: 327–351.
- Moreland, R. L. 1999. Transactive memory: Learning who knows what in work groups and organizations. In L. L. Thompson, J. M. Levine & D. M. Messick (Eds.), *Shared cognition in organizations: The management of knowledge*: 3–31. Mahwah, NJ: Erlbaum.
- Pfeffer, J., & Salancik, G. 1978. *The external control of organizations*. New York, NY: Harper & Row.
- Pugh, D. S., Hickson, D. J., Hinings, C. R., & Turner, C. 1968. Dimensions of organization structure. Administrative Science Quarterly, 13: 65–105.
- Reagans, R., Zuckerman, E., & McEvily, B. 2004. How to make the team? Social networks vs. demography as criteria for designing effective teams. Administrative Science Quarterly, 49: 101–133.
- Ridgeway, C. 1991. The social construction of status value: Gender and other nominal characteristics. *Social Forces*, 70: 367–386.
- Ridgeway, C. 2001. Inequality, status, and the construction of status beliefs. In J. Turner (Ed.), Handbook of sociological theory: 323–342. New York, NY: Kluwer Academic/Plenum.
- Ridgeway, C., & Correll, S. J. 2004. Unpacking the gender system: A theoretical perspective on cultural beliefs and social relations. *Gender & Society*, 18: 510-531.
- Roure, J. B., & Keeley, R. H. 1990. Predictors of success in new technology based ventures. *Journal of Business Venturing*, 5: 201–220.
- Ruef, M. 2010. The entrepreneurial group: Social identities, relations, and collective action. Princeton, NJ: Princeton University Press.
- Ruef, M., Aldrich, H. E., & Carter, N. M. 2003. The structure of founding teams: Homophily, strong ties, and

- isolation among U.S. entrepreneurs. *American Sociological Review*, 68: 195–222.
- Scott, R. W. 2001. *Institutions and organizations* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Sine, H. M., Mitsuhashi, H., & Kirsch, D. A. 2006. Revisiting burns and stalker: Formal structure and new venture performance in emerging market sectors. *Academy of Management Journal*, 49: 121–132.
- Tajfel, H., Billig, M., Bundy, R., & Flament, C. 1971. Social categorization and intergroup behavior. *European Journal of Social Psychology*, 1: 149–177.
- Thomas-Hunt, M. C., & Phillips, K. W. 2004. When what you know is not enough: The effects of gender on expert's influence within work groups. *Personality and Social Psychology Bulletin*, 30: 1585–1598.
- Tolbert, P. S., & Zucker, L. G. 1983. Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880–1935. *Administrative Science Quarterly*, 28: 22–39.
- Vissa, B., & Chacar, A. S. 2009. Leveraging ties: The contingent value of entrepreneurial teams' external advice networks on Indian software venture performance. *Strategic Management Journal*, 30: 1179–1191.
- Wagner, D. G., & Berger, J. 1993. Status characteristics theory: The growth of a program. In J. Berger & M. Zelditch (Eds.), Theoretical research programs: 23–63. Stanford, CA: Stanford University Press.
- Winship, C., & Mandel, M. 1983. Roles and positions: A critique and extension of the blockmodeling approach. *Sociological Methodology*, 14: 314–344.

Wittenbaum, G. M., & Stasser, G. 1996. Management of information in small groups. In J. L. Nye & A. M. Brower (Eds.), What's social about social cognition? Research on socially shared cognition in small groups: 3–28. Thousand Oaks, CA: Sage Publications.



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