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Authors

Gibbs, Jennifer L Gibson, Cristina B Grushina, Svetlana V et al.

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Understanding Orientations to Participation:

Overcoming Status Differences to Foster Engagement in Global Teams

Abstract

A key challenge facing global teams lies in overcoming status differences in order to elicit participation and input from all members. This study extends prior research—which has focused largely on individual-level factors such as language, culture, and location that create status differences that fracture teams and reduce participation—by examining members' underlying orientations to participation, team practices that encourage these, and their impacts on global team effectiveness. We draw on a rich multilevel, mixed-method data set consisting of 45 in-depth interviews and a comprehensive analysis of conference calls from 9 global teams in a multinational integrated mining, minerals processing, and manufacturing organization. We identified three orientations to participation (*Help, Learn*, and *Engage*). Team-level analysis revealed team practices that encouraged certain orientations to participation to emerge, in particular *relationships across sites* and *input solicitation*. Only the *Engage* orientation was positively associated with overall global team effectiveness. Implications of these findings are discussed.

Introduction

Multinational corporations and other types of global organizations often set up global teams to span various country locations and serve as mechanisms for knowledge sharing and coordination of work across geographical and cultural boundaries (Cramton & Hinds, 2014). These teams are important coordination mechanisms because they provide access to distributed expertise. Their often dynamic structures enable creative and flexible responses that increase the potential for innovation (Gibson & Gibbs, 2006). However, simply convening organizational members from different locations does not ensure the representation and sharing of expertise and input from these sites. Research has found that geographical and cultural faultlines can hamper global teams (Cramton & Hinds, 2005; O'Leary & Mortensen, 2010). Further, status differences may arise that privilege the knowledge and perspectives of some members and discount those of others (Berger, Cohen, & Zelditch, 1972; Levina & Vaast, 2008).

Prior research has focused on individual level differences in language, culture, and geographical location as potential barriers to communication within global teams (e.g., Cramton & Hinds, 2014; Metiu, 2006; Neeley, 2013). Increasingly, scholars recognize that these attributes intersect and interact in complex ways, giving rise to the view of demography as intersectionality (Collins & Bilge, 2020; Rosenthal, 2016). Yet there is also research that documents contexts in which all members, regardless of demographic characteristics, persist and engage as active contributors (Gibson, Dunlop, & Cordery, 2019). Research has documented that practices at the team level work to enhance or inhibit participation (Pentland, 2012; Woolley et al., 2010). For instance, research into employee voice behavior suggests that employees' willingness to speak up also reflects group-level factors (e.g. Bonito, Keyton, & Ervin, 2015; Klaas, Olson-Buchanan, & Ward, 2012; Morrison, Wheeler-Smith, & Kamdar, 2011).

In this study, we explore how participation and status in global teams are communicatively constructed through team interactions. We conducted a mixed-methods examination of interviews and conference call transcripts from a set of global teams in a multinational integrated mining, minerals

processing, and manufacturing organization. In doing so, we both construct and test a grounded theory of participation in globally distributed teams.

We find that members differed in their *orientation to participation*. By orientation to participation, we mean the socially constructed expectations a member has for their participation, which manifest in how they understand their role and status within the team. Specifically, our grounded analysis uncovers three distinct orientations to participation (*Help, Learn*, and *Engage*), and four practices that give rise to these orientations (pertaining to relationships, input, structure, and energy). Next, we quantitatively explored the practices, orientations, and team effectiveness, using Bales' Interaction Process Analysis (IPA) to code team-level interaction in conference call transcripts (Bales, 1950), as well as objective ratings of team effectiveness from outside the team. Our findings reveal that in contrast to prior research that has focused on language, culture, and location, status is primarily constructed communicatively through team interactions, which manifest in orientations to participation. This calls attention to the importance of team-level practices for encouraging participation in global teams, especially those practices that pertain to building relationships across sites represented on the team and soliciting input from diverse members.

Literature Review

Global Team Participation as a Reflection of Status

Social interaction is often organized by status (Berger et al., 1972). Status is the "prestige, esteem, worth, or relative social position of an individual or group" (Neeley & Dumas, 2016, p. 14). Although status is sometimes confused with power, the latter is based on resources one controls, not the degree of respect accorded by others, although the two are often related. Status may be conferred by status characteristics – attributes such as gender, culture, race, and occupational position – for which a social basis for discrimination exists and on which individuals are evaluated differently. Though these status characteristics are often unrelated to the group's task, they may come to define status relations among group members such that higher status members tend to be given more action opportunities and more

performance rewards (Berger et al., 1972).

Status has been found to determine evaluations of group members and thus the distribution of participation, influence, and prestige (Berger et al., 1972). Bales and colleagues found that those who initiate conversational activity are most likely to receive it in turn and are often ranked highest in terms of having the best ideas, guiding group discussion, and showing leadership (Bales, Strodbeck, Mills, & Roseborough, 1951). Status differences among team members have also been found to inhibit open dialogue (Hoegl & Gemuenden, 2001). Global teams, in particular, are likely to face particular challenges due to status differences that hinder participation. The result may be that group members with high status are more likely to speak up and express opinions during group meetings than members with low status (Berdahl & Martorana, 2006) and that the input of high-status members is valued and prioritized over that of low-status members.

Much of the prior research on global teams has tended to focus on individual demographic characteristics as sources of status. For example, scholars have suggested that location may be a source of status, if geographic subgroups emerge and engender divisive identities that create rifts within the team and limit knowledge sharing and participation across subgroups (Cramton & Hinds, 2005). These subgroups may be infused with unequal status because more central locations (e.g., headquarters) have greater access to resources or information and therefore are more influential in decision-making, while more remote locations are sidelined, sometimes inadvertently. For instance, Metiu's (2006) ethnographic study of a global software team distributed between the United States and India found that status differences aligned with geographic distance to reinforce the U.S. group as high status, which hindered cooperation among the subgroups. Levina and Vaast (2008) also found status differences that hindered collaboration arose because of an imbalance of onshore and offshore resources in a global outsourcing work arrangement.

Second, language may be a source of status, if it is more difficult for nonnative speakers to contribute to team discussions (Neeley, 2013). Although English is the de facto language for many

mixed-language global teams, degrees of language proficiency are likely to vary to the disadvantage of nonnative speakers in both oral and written communication. This may create a dynamic in which less fluent speakers feel judged or accorded less respect, reinforcing their reluctance to participate (Clyne, 1994). This may be especially pronounced in teleconferences or other synchronous meetings in which it is difficult for members who are not fluent to share complex ideas spontaneously (Dube & Pare, 2001; Harzing & Feely, 2008). Asymmetries in language fluency have been found to exacerbate and reinforce existing subgroup differences and associated status differences within global teams (Hinds, Neeley, & Cramton, 2014; Metiu, 2006; Zakaria et al., 2004).

Finally, culture may serve as a source of status differences, if it drives some members to contribute more directly and frequently, while others hesitate or remain quiet (Earley & Gibson, 2002; Oetzel & Ting-Toomey, 2003). For instance, cultures range from high to low context based on the degree to which meaning is inferred from context versus being stated directly and explicitly (Zakaria, Amelinckx, & Wilemon, 2004). Team members from cultures at the low context end of the continuum are likely to value clear, open communication and adopt direct communication styles. Members from high context cultures, who prefer more indirect and implicit communication styles to save face and avoid conflict, may perceive their direct styles as confrontational (Zakaria et al.). This difference may affect status as the viewpoints of members from low context cultures come to dominate a group. Indeed, an analysis of the conversational style of Southeast Asians (characterized as high context) found that they were unsuccessful in turn maintenance when competing with Europeans (characterized as low context) (Clyne, 1994). Some global team members are more direct and dominant in meetings as they strive for clarity, and this may then be associated with social standing, while others are more hesitant to speak up out of concern for face saving and group harmony (Aritz & Walker, 2009; Dibble & Gibson, 2013).

Even if the implications of any one of these individual characteristics for status in a global team may seem relatively clear, what happens when the high and low status characteristics coincide within the same person? This is a central concern in research on intersectionality (Collins & Bilge, 2020). Broadly

speaking, intersectionality posits that different social divisions interrelate in terms of the production of social relations and in terms of people's lives, and they are seen as mutually constitutive in terms of experience and practice (Anthias, 2012). Recent debates have attempted to refine intersectionality. For example, McCall (2005) made a distinction between anti-categorical and intra-categorical analyses. An anti-categorical lens *refuses* categories, allowing for a narrative approach to complexity in terms of individual lives, while an intra-categorical lens might look at, for example, how language is crosscut by location and culture. Others suggest that intersectionality is a heuristic device broadly applicable for understanding social relations, including the intersections between advantages and disadvantages (Anthias, 2009). When multiple sources of status exist within a group that may be inconsistent, research has suggested that members might combine the available status information (Berger et al., 1972), although exactly how this occurs in naturalistic team settings—especially global teams, in which members are likely to differ on a number of status attributes—remains unclear.

In addition to recognizing the complex intersection of demographic characteristics, scholars have also acknowledged that status differences emerge not only based on these individual characteristics, but also based on communication patterns. Hence, status is subjective and rooted in direct or observed interpersonal interaction. Although often entrenched and self-reinforcing, status hierarchies can also change over time to reflect social changes (Magee & Galinsky, 2008). Hence, status is socially constructed, such that initially non-valued characteristics (such as a preference for artist Paul Klee over Wassily Kandinsky) may become status characteristics that affect the evaluation of group members (Ridgeway, 1991). This occurs through a process of social validation that operates through the group's interactions. In this process, status creation occurs when an initially nonvalued characteristic becomes associated with already valued status attributes, and generalized performance expectations emerge that are then connected with that characteristic (Berger & Fisek, 2006). But given the focus on demographic characteristics as sources of status in the literature, we know much less about the role of team interaction in shaping status and subsequent participation.

Social Construction of Status through Team Level Practices

Communication scholars have recognized that status is socially constructed (Berger & Fisek, 2006; Ridgeway, 1991) through interpersonal processes of stratification that play out in both verbal and nonverbal communication (Fiske, 2010). Global teams scholarship is starting to acknowledge that status is malleable, can be gained or lost, and is constantly in flux. For example, Neeley and colleagues focused on how contextual changes such as the implementation of a lingua franca (a language adopted as a common language between speakers whose native languages are different) can lower nonnative speakers' status in a global organization and result in an "unearned status gain" for native speakers (Neeley & Dumas, 2016). Metiu (2006) focused on "status closure" in global teams and its impact on intergroup relations, drawing on Bourdieu's (1984) notion of status struggles as ongoing and never fully resolved. Kilduff, Willer, and Anderson (2016) explored "status disagreement" in which group members disagree on perceived status rankings; they found that certain disagreements led to reduced contributions to the group and lower performance. Research on global outsourcing arrangements has found that communication practices empowered managers onshore and marginalized foreign assignees from offshore centers (Gibbs, 2009). Finally, Gibbs et al. (in press) found that status differences were constructed through the discursive practices of global team members, such that status dynamics played out quite differently in teams with similar composition and tasks.

Several scholars have called for more focus on intercultural interaction, in terms of what members actually *do* in global teams, rather than just the proclivities they bring that might be based on language or culture (Hinds, Liu, & Lyon, 2011; Zellmer-Bruhn & Gibson, 2014). Upon joining a global team, moving from individual to collective action requires a shift in frame of reference from the self (or dyad) to coordinated interaction among multiple parties. Theories and research grounded in constitutive views (e.g., Putnam & Nicotera, 2009) provide clues as to what facilitates this shift.

A constitutive view has been adapted by organizational scholars as the communicative constitution of organizations (CCO) perspective. It holds that organizations are not concrete containers or

specific, enduring realities in which interaction and activity take place. Instead, they are constituted through communication and should be treated as "social phenomena constituted by interactions, language patterns, sense making, and symbolic processes" (Putnam & Nicotera, 2009, p. ix). The CCO perspective emphasizes the formative role of communication in organizing processes and foregrounds close empirical analysis of micro-level language use as a main path toward understanding the formation and evolution of wider organizational discourses (Grushina, 2017). The CCO perspective thus focuses on interaction as its central phenomenon of study and regards teaming as constituted by and emerging through the interaction of team members (Gibbs, Nekrassova, Grushina, & Abdul Wahab, 2008).

Similarly, Mokros (1996) called for the study of interaction as the ground on which to build an understanding of the social world. Such a focus views interaction as a process, or "an interactional system within which events and objects are achievements (of identity), not as stable entities, but as contingent realizations" (p. 6). In this view, social relations among team members are created and sustained by collectively tackling problems and issues unique to a particular work practice, thus demonstrating an interplay of agency and context rather than members unreflexively absorbing and replicating a body of knowledge (Kakavelakis, 2010). Discourse is seen as a compilation of opportunities and guidelines that govern an individual's actions and affect how participants orient to the interaction order; participation is viewed as constituted through communication practices and as a process of meaning-engagement, which recognizes that in naturally occurring interaction, practices are adapted by participants as they engage in interactions-in-context (Mokros & Aakhus, 2002).

Metiu and Rothbard (2013, p. 456) define group engagement as "the process by which interdependent individuals engage with each other around work tasks to develop and maintain mutual focus of attention in an interaction episode." They found that such mutual focus developed when there was both high individual member motivation as well as a compelling direction and frequent and informal interactions. This process emerged when group members were intensively focused on a common task and shared positive emotions. Although mutual focus of attention occurs easier when persons are together,

Metiu and Rothbard found that it can also occur in distributed settings, especially with an artifact – such as a software "build" or documents – that helps participants focus their attention and effort (p. 465).

However, interaction within groups does not always exhibit a capability for collective action. For instance, groups characterized by less frequent and more formal interactions, such as through team meetings, may lack the "collective effervescence" (Collins, 2004) needed to sustain problem solving and move forward with group tasks. Formal team meetings may not foster group engagement because they are often focused on information dissemination and do not sustain mutual attention (Metiu & Rothbard, 2013). Informal and unstructured interactions are often more interactive and engaging and thus likelier to lead to creative problem solving (Hargadon & Bechky, 2006). Examining "the average amount of energy between A and B, A and C, and B and C," Pentland (2012, p. 65) found that this energy and successful team performance were linked, particularly in distributed teams communicating mainly by telephone. This calls attention to the importance of evenly distributed participation, which has been found to be a positive outcome, especially in computer-mediated groups (e.g., Fjermestad, 2004; Rains, 2005). Indeed, groups in which conversational turn-taking is more evenly distributed have been found to have more collective intelligence than those dominated by a few members (Woolley et al., 2010).

In summary, a growing body of research suggests that status is constructed and emerges dynamically from team interactions. Such a view may help explain the intersectionality of status differences arising from various individual characteristics because it suggests that how status is enacted depends on particular communicative interactions and practices. Yet achieving participation is difficult when many global teams coordinate primarily through formal team meetings because of the constraints of working across time zones and the need to incorporate scheduling and availability around the globe. The increased reliance on virtual work everywhere necessitated by the COVID-19 pandemic underscores the importance of addressing the ongoing challenge to develop practices in global teams that engage members. And although it lays a useful foundation, prior research leaves unanswered questions. We know little about the micro-level processes and behaviors, particularly those relating to acts of communication,

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through which status may be socially constructed and addressed, such that members develop a specific orientation to participation, consisting of the expectations they have for participation, including how they understand and enact their role and status within the team. Consequently, we explore the following research questions:

RQ1: How are global team members oriented toward participation?

RQ2: How are orientations to participation developed?

RQ3: How are orientations to participation related to team effectiveness?

Methods

Research Context

The research context was a division of a multinational integrated mining, minerals processing, and manufacturing organization. The company was headquartered in the U.S., although its most highperforming refineries were located in Western Australia. Its official language was English. A unique feature of this sample is that each of the global teams had highly similar composition and objectives. That is, the nationalities, locations, geographic dispersion, and tasks were the same for all of the global teams. This allowed us to control for features that might have otherwise required alternative explanations for our findings. Specifically, the global teams we studied each included members from nine different plants in six countries (Australia, Brazil, Jamaica, Spain, Suriname, and the United States); with typically one representative from each plant, a facilitator, and two sponsors (for a total team size of 12 core members per team). Each team was charged with sharing, integrating, and managing members' local knowledge of a particular aspect of plant operations in order to generate organizational best practices to ultimately improve standardization and productivity across the firm.

Hence, work within the teams entailed discussing with others how they did things at different locations, sharing ideas about what constituted "best practice," codifying these as generalizable best practices in the firm's knowledge repository and then promoting the spread of these superior operational procedures across the organization. Work on the teams was in addition to members' work roles, and in the main, membership was based on formal assignment, but volunteers were welcomed. Each team had a formally assigned facilitator. Most of the global teams' work was done during monthly teleconferences that were supplemented by discussion boards, email listserv exchanges, instant messaging, and, on rare occasions, face-to-face team meetings.

Data Collection

To address our research questions, we conducted a mixed-methods analysis of real-time team interactions as revealed in observations of global team meetings coupled with analysis of experiences expressed in interviews. This approach let us examine how participation was communicatively constructed through actual team interaction as well as through members' sensemaking in interviews.

In-depth interviews. In order to capture team members' perceptions and attitudes toward their teams and their role in them, we conducted in-depth interviews in English at various plant locations; interviewees included team members and facilitators from each location. Due to availability constraints, the final interview sample consisted of 45 members across 9 teams. The sample was characterized by representative diversity of location, nationality, age, and team role. That is, we attempted to include the facilitator and at least two to three other members of each team, and the demographics of the interview sample matched those of the population as a whole. Most interviews were conducted face-to-face and lasted about one hour; all were semi-structured, including questions about features such as team composition, structure, processes, and outcomes (protocol available upon request). For example, we asked, "How do you interact with the team? Which team resources have you used? What expectations are there for your participation? In your experience, how has conflict or disagreement been handled within the team? How do you feel about your involvement with the team?" We probed for specific interactions during meetings and other examples of exchanges within teams. We audio recorded and transcribed the interviews verbatim. Transcription resulted in 1,386 double-spaced pages of text. See Table 1 for a description of individual level characteristics.

[INSERT TABLE 1 ABOUT HERE]

Teleconference participation. Team members primarily interacted as a group through conference calls, which provided a means of capturing their actual communicative behavior and participation patterns. Members from each of the nine locations were expected to participate, but that did not always happen. Team facilitators convened the calls and most adhered to an agenda, with each location's sharing of updates being one of the main goals for calls. We recorded all conference calls held during a six-month period, for a total of 27 calls across nine global teams. On average, each call lasted 50 minutes. One of the researchers listened to these calls, recorded them, and transcribed the discussions. This resulted in 1,134 double-spaced pages of text (average transcript length per call was 42 pages). See Table 2 for a description of team characteristics.

[INSERT TABLE 2 ABOUT HERE]

Independent ratings of team effectiveness. We obtained ratings of the extent to which the teams were accomplishing the objectives set out for them by the organization from the Global Knowledge Manager (GKM) at the firm after the interviews and conference call data collection had been completed. The GKM had oversight across all of the global teams in the organization, and worked to ensure the effective implementation and development of the teams. As a result, he had expert knowledge and experience with teams and was best equipped to compare the effectiveness of the different teams. In rating team effectiveness, the GKM was asked to consider each one independently and then to respond to the following three questions by rating each team from 0 to 10: (1) "To what extent have the changes to processes and procedures that have been developed by each team below during [the study period] added value to [the organization]? (e.g. through cost savings, improved yields, reduction in raw materials consumption)" ("not at all" to "a very great extent"), (2) "To what extent has each team below created and implemented new performance practices or standards, during [the study period], that have raised average performance across all locations?" ("not at all" to "a very great extent"), and (3) "To what extent was each team 'active' during [the study period]? That is, to what extent did the team members have

routine teleconferences, use their website, create practices and solve problems during [the study period]?" ("not active at all" to "extremely active"). Given the correlations amongst these items were very high (ranging from .80 to .86), they were combined into a composite team effectiveness rating (Cronbach's alpha = .93).

Data Analysis

Grounded interview analysis. To better understand both the individual- and team-level aspects of participation, we conducted a qualitative analysis of the interview transcripts according to the guidelines of grounded theory (Glaser, 1992; Strauss & Corbin, 1990), which calls for a systematic set of data analysis procedures that assist in the inductive development of theory from the data. This approach focuses on a close, ongoing analysis and interpretation of the data with a goal of recognizing patterns and interrelationships among the phenomena of interest (Strauss & Corbin, 1990). We used the constant comparative method to move iteratively between data and emergent theory. The transcripts were entered into Atlas.ti, which was used to create a codebook and assign codes, create memos to facilitate understanding of, and links between, codes in the data, keep track of code frequencies, and examine excerpts related to particular codes.

First, two of the authors divided the transcripts and coded them line-by-line using the logic of open coding, which Strauss and Corbin (1990, p. 61) described as "the process of breaking down, examining, comparing, conceptualizing, and categorizing data." The unit of analysis for each code was typically the length of an interview question response. However, some coded excerpts included multiple pages to preserve contextual meaning. Codes were derived inductively from the transcripts. Decisions about coding and categorizing data were made continuously during the cyclical process of analysis and interpretation by two of the authors—one of whom had conducted the interviews and observations but the other of whom was a relative "outsider" to the research—to generate multiple perspectives and alleviate researcher bias. The two authors first coded five transcripts each and then met to compares codes, discuss discrepancies, develop consistency, and arrive at intercoder agreement (Lincoln and Guba, 1985). Some

examples of open codes included power dynamics, teleconference call quality, relationship-building, speaking up, energy, personal validation, and structure.

Second, after multiple rounds of open coding, we conducted axial coding as an intermediate step, defined as "a set of procedures whereby data are put back together in new ways after open coding, by making connections between categories" (Strauss & Corbin, 1990, p. 96). In this step, we aggregated raw codes and looked for relationships among them. At this point, open codes were grouped according to whether they pertained to participation expectations and challenges or to communication practices to motivate participation. For example, the codes power dynamics, teleconference call quality, relationshipbuilding, speaking up, and cultural differences were all grouped into the axial category of participation challenges. The codes benefits of technology, common goals, energy, personal validation, and structure were all grouped into the axial category of *motivating participation*.

As a third iterative step, we engaged in selective coding to identify broader themes and dimensions that would form our emergent theoretical structure. This step involved understanding and integrating smaller individual categories as pieces of a larger core category to produce an organizing scheme, or "paradigm model" (Strauss & Corbin, p. 96) to enable further systematic thinking about the phenomenon under study. At this point, we aggregated codes into three underlying orientations to participation: Help, Learn, and Engage. We came to understand these as encompassing the socially constructed expectations a member has for their role and status within the team, which served to orient and construct the nature of their (and others') participation. See Table 3 for definitions and sample quotes.

[INSERT TABLE 3 ABOUT HERE]

We also unearthed team practices that contributed to global team participation. We identified four main sets of practices, including: (1) Relationship-building across sites (R), (2) Input-inviting (I), (3) Structure-enabling (S), and (4) Energy-enhancing (E). Notably, the use of RISE (relationships, input, structure, and energy) practices varied across teams and was evident in the communications of different team members and not confined to a single member such as a team facilitator. However, facilitators often

played a key role in initiating RISE within their teams and in emulating the behaviors they wished their team members to exhibit. See Tables 4 for definitions and sample quotes.

[INSERT TABLE 4 ABOUT HERE]

Throughout this systematic coding process, we moved iteratively back and forth between theory and data by comparing insights from the data with the literature and vice versa so that each informed the other. We coded until we reached "theoretical saturation" in which no new codes or insights emerged from the data (Glaser and Strauss, 1967). Our inclusion of multiple and varied voices in the analysis helped to establish credibility through providing multivocality (Tracy, 2010). Similar to the process described by Jay (2013) and Tracy (2010), we also fed back preliminary findings to our organizational partners through member checks to ensure the trustworthiness of the data (Lincoln & Guba, 1985) and to check our understanding of the orientations to participation and team practices.

Content analysis of conference calls. Once we identified and refined both the Help, Learn, and Engage orientations to participation, we turned to our conference calls transcripts to analyze actual communication behavior more systematically using Bales' interaction process analysis (IPA) (Bales, 1950). This is a content-analytical approach that has been commonly used to study small group interaction, both face-to-face and virtual (Keyton, 2003; Reese, 2017; Rice & Love, 1987). The coding scheme includes 12 codes and distinguishes among socioemotional and task content as well as giving versus receiving information (see Table 5). We transcribed verbatim conference calls for 9 of the global teams and then unitized them into "thought units" (Reece, 2017), which corresponded with conversational turns or turns at talk (TaT), defined as "identifiable components or units, ... including single words, single clauses of phrases, single sentences, or any combination of these" (Drew, 2005, p. 80). In this sense, TaT are building blocks of interaction.

[INSERT TABLE 5 ABOUT HERE]

There were a total of 3731 of these units across the 9 teams. The first author worked with two

independent coders to code each transcript using the 12-code coding scheme, as well as indicating when a specific speaker was addressed. The coders were carefully trained and participated in several rounds of preliminary coding to refine the code frame, discuss any discrepancies, and identify decision criteria for each code. This process resulted in an acceptable threshold of inter-rater reliability, with Cohen's Kappa (Cohen, 1960; Gwet, 2014) ranging from .72 to .85 for each of the 9 team transcripts. We then aggregated these cases to create two additional datasets at the individual level (N=91) and the team level (N=9). We recorded for each conference call the number of participants actually on it, the number of team members invited to it, and individual demographic data including each speaker's team, country, region, location, role (facilitator or member), gender, age, tenure, and English proficiency (native or nonnative speaker). We further analyzed the call transcripts to record each member's turns at talk (the number of times they spoke on a given call). This analysis also revealed which participants on a call actually had a TaT during the group interaction. Data from these call descriptors was useful in detecting objective trends in participation.

Next, we constructed variables at the individual level for the Help, Learn, and Engage orientations using the Bales codes. Specifically, we operationalized *Help* as giving suggestions, opinions, or information (sum of codes 4, 5, and 6) during an interaction and *Learn* as asking for information, opinions, or suggestions (sum of codes 7, 8, and 9) during an interaction. For each, we divided by the total number of interactions, in order to account for varying length of conference calls. Given our conceptualization of *Engage*, we measured it as the ratio of *Learn*-oriented to *Help*-oriented interaction, in order to capture a relative balance between the two (with a score closer to 1 indicating the bidirectional exchange of both *learning* and *helping*).

We also constructed quantitative variables at the team level for each of the four RISE practices. Specifically, we coded Relationship-Building Across Sites (R) as the number of conversational turns in which a TaT from one site was followed by a TaT from another site. Input-Inviting (I) was coded as the total number of times a member was addressed by name on the call. Structure-Enabling (S) was coded

based on whether the team used formal presentations prepared in advance and rotated across locations to help structure the call (1 if yes, 0 if no). Finally, Energy-Enhancing (E) was coded as the total number of positive socioemotional content (sum of Bales codes 1, 2, and 3). These codes included humor, greetings, niceties, and agreement that served to create positive energy within the team. For a road map of which data sources, analyses, and measures were used to answer each of the three RQs, see Table 6.

[INSERT TABLE 6 ABOUT HERE]

Individual Level Findings

Orientations to Participation

In response to RO1 (How are global team members oriented toward participation?) our interview analysis revealed important differences in the ways members spoke about their perceived role and status in the team, and how these discursive practices constituted different orientations to their participation. This analysis revealed three underlying orientations (*Help*, *Learn*, and *Engage*). Importantly, each orientation signals a different way that status is enacted in the team.

Help orientation. The first orientation we identified was coded as *Help*. Members who expressed this orientation tended to regard the teams as knowledge repositories and their job as the dissemination of knowledge. A quote from an Australian member illustrates this: "There's an avenue to start to spread the information that I've accumulated in the past 40 years and...my boss and his boss won't let me retire until I've done the dissemination of knowledge" (Team Tool). This member felt he had an obligation to share his hard-earned expertise with the team, and this belief affected his orientation to participation. At times this obligation was viewed as a burden:

I use that analogy a lot, I mean with improvement, right? So what I see a lot of is when we do improvement, right, people are pushing the rock up the hill, right? But then we stop pushing the rock, we gotta continue to put pressure on, otherwise that rock's gonna roll back down. I use that analogy a lot, but sometimes I do feel like ... I've got the ball, I got the ball, the rock on the top of the hill. (USA, Team Practice)

As this observation by an American reveals, "helping" the team improve through sharing of best practices

could feel demanding because it involved pressuring other locations to collaborate and comply. Implicit in this analogy is the view that certain locations were driving the knowledge management process by imposing their goals and agenda. Several statements reveal a desire to help colleagues elsewhere. As one member said, "And then how does it relate to my job? Yeah, it does, it's important because again I see what people are doing. I may do something here, and there may be a better way of doing it...where I can offer suggestions to them" (Australia, Team Schema). Another said:

Because I know the people pretty well, I understand where they're coming from, and I've been to their sites, so I know the problems that they've got. So it's good to see how things are improving. I get a bit of a kick out of it, because if things are going well it's great to hear, and if they're not, then...you can hopefully help them out. (Australia, Team Amalgam)

As these comments reveal, these team members genuinely wanted to help those in other locations. An awareness of the overarching mission of the teams and of the opportunity to contribute and "help" the other sites, although well intentioned, often masked status differences among the sites. Deeper examination revealed that the Help orientation was characterized by an underlying ethnocentrism ("our way is the right way") because members never acknowledged that they might have something to learn from the other sites as well. They assumed the best practices were at their site and wanted to share them.

Learn orientation. The *Help* orientation was reflected in a pattern of unidirectional contributions to the team; the *Learn* orientation was characterized by a similar – but opposite – one-way flow of knowledge. In this orientation, the team was regarded as a way to learn from the expertise of others, with the global team seen as a knowledge repository or database. As one member put it, "It's a place where you can, as I said, find out a lot of information which will be helpful for your whole career" (Brazil, Team Flange). Another indicated he felt he had little to contribute: "I'm pretty much just going to the site and gathering information just to broaden my knowledge base ... I'm just viewing the [team] as a learning aid" (Jamaica, Team Flange). Members expressing this orientation tended to regard the team as a resource, a place where supervisors told them to obtain information—as opposed to a place where knowledge was mutually and equally shared, or where their own contributions might be valued, too:

A lot of issues come up on site and people ask, people ask for solutions and a lot of times ... sometimes instead of me just trying to take a day and a half to bring up some solution I can just ask somebody quickly. I'm more, directly just sending emails is the best ... to the person, and say "Do you do this at your site?" and whatever you know. For me, for some reason, and I don't know why, Australia does everything, so I just ask somebody from an Australian site what they've done, and I usually get the answers from them. (Jamaica, Team Joint)

This quote by a Jamaican team member reveals that the Australian sites were considered the source of all knowledge, due to a perception that "Australia does everything," and thus a good place to seek answers. Interestingly, members expressing the *Learn* orientation often shared feelings of isolation because many were in more remote locations. This feeling was evident in interviews as well as sporadic conference call participation. As a Brazilian team member said, "We are separate here, far away from everyone, but I like [Team Joint]. It is very busy, and my English is not very good often, but I try to listen, to learn." A member of one of the lower performing plants (in the United States) noted the team's knowledge benefits:

For me, that feels like a cheat-sheet, you know, where I can go and not have to base all my decisions on just, you know, book knowledge or past experience and whatnot and I can sort of, you know ... you know, it's like an open book test – ask somebody else, you know, what the right answer is, you know. (USA, Team Plug)

Learn-oriented members tended to have a passive view of the global teams, regarding them as a "learning aid" or "cheat sheet" source of the "right" answers to problems in their work. Although these participants generally felt positive about the teams and considered the knowledge they gained quite useful, they tended to see their own role as limited to receiving knowledge without their having anything to contribute to the team's shared knowledge base. One participant noted, "So, in a way, it's kind of selfcentered participation, but self-centered in that people get a bit of action when they've got something they need to know, but are not necessarily motivated for the big picture" (Australia, Team Cap).

Engage orientation. Although the *Help* and *Learn* orientations seemed opposite, both shared the perception of knowledge sharing as a one-way informational flow in which participants saw their role as either provider [Help] or recipient [Learn]. In contrast, the Engage orientation was mutually constitutive, bidirectional, and collaborative. Although demanding the most investment by members, it also seemed to deliver the greatest payoffs as illustrated by the facilitator of Team Amalgam:

I may know the answer, and I could go ahead and say it, but I need to draw the engagement between site to site because often you'll get it going offline then the two sites communicating, which is great, rather than me having to, to do it. Because I should facilitate rather than take one from the next because then you don't build the bridge across... it's a one-way bridge. It's like me in the center and they're all going out, and that's not beneficial. (Australia, Team Amalgam)

The Engage orientation was also marked by an understanding that instead of one site driving the agenda, each site had unique knowledge and insights to contribute. As an Australian participant noted:

I suppose it's trying to get everyone to gel onto the same page and understand that you can get more out of it, but you've got to put something in, and that we can support each other. And it's not just the Australians bashing the, you know, the table saying, 'You will, you will.' Everyone, it's getting people to a point where they'll engage and see that, break down that barrier a bit. People will answer questions and part with information that they may or may not have previously. (Australia, Team Pipe)

This statement highlights that engagement was not characterized by an ethnocentric, compliance-gaining perspective, but rather by one of mutual support and acknowledgement that all locations were sources of unique expertise. When this view was prevalent, participation from other sites increased.

Finally, the *Engage* orientation coincided with a sense of meaning and importance. Team members expressing this orientation were characterized by a sense of excitement about participating and by a collaborative approach to sharing knowledge. In their approach, responses collectively built upon one another, with the entire team contributing to each given interaction, rather than just being either a "provider" or a "recipient." This was reflected by a Brazilian participant:

So they invited me to go to a call... my coordinator at the moment called and asked me if I wanted to be part of it, said it was really important to the knowledge effort, to learn and share knowledge, and to be part of something bigger that you can share your work and have your work recognized. Not only on the minimum standard in the company... so I thought it could be interesting to be part of it. (Brazil, Team Amalgam)

This quote reveals that engagement was driven by a sense of meaningful work in terms of feeling part of "something bigger" and having one's work recognized.

Development of Orientations to Participation

Qualitative analysis. To answer RQ2 (How are orientations to participation developed?) we first examined demographic characteristics highlighted in prior research on status, such as location (e.g.,

Western Australia vs. Atlantic region), language (nonnative English speakers vs. English speakers), and culture (high versus low context cultural orientation), as potential factors that resulted in orientations to participation.

While it was true that members from refineries in Western Australia (WA) were held in high regard, given these locations initiated many technological advances, the headquarters of the organization was located in the U.S. Yet the refineries in the U.S. were not performing well at the time, resulting in these members reporting feeling lower in status. Hence, the status of members based on simply on location was equivocal. Further, the views and voices of native English speakers sometimes dominated, such that may have been conferred with higher status, but this was not always the case. Many non-native English speakers were also vocal. Likewise, coinciding with being low context (Oetzel & Ting-Toomey, 2003; Zakaria et al., 2004), members from Anglo cultures (Australians and Americans) tended to be more direct; while those from high context cultures (typically those from Brazil or Jamaica) disagreed less often, which may have conferred lower status. But there were numerous exceptions to this as well.

Further, location, language, and culture intersected within an individual in a variety of ways, so it was difficult to predict the status of a given team member based on demographics alone. For example, a member from the Atlantic region (which may have been conferred lower status) who was also a native English speaker (which would have conferred higher status), might also be from a high context culture (lower in status). This intersection made it nearly impossible to determine exactly what demographics might imply in terms of status.

Likewise, we could not discern clear patterns among individual demographic characteristics and specific orientations to participation. Some members with lower status characteristics were coded as having a *Help* orientation; others were not. In particular, there was no pattern of individual demographic characteristics associated with the *Engage* orientation. For example, Gabriel, a younger employee from Brazil whose demographic characteristics (in terms of location, language, and culture) presumably would have characterized him as lower status was also someone who might have been expected to take a Learn

orientation. However, he explained that his supervisor encouraged him to join the team to be "part of something bigger," where he could share knowledge and gain recognition. Both his supervisor and team facilitator set the expectation that he should engage and contribute:

As soon as you see the importance of the [team] you always intend to be more a part of it...it's the curiosity to know what's happening, and then... you'll see that it's important that you can share your work, you can share knowledge, you can share experience, so you'll start to join and be more part of it, you'll try to participate more... I was lucky that I had somebody to watch me, to bring me to the team and say that's important. (Brazil, Team Amalgam)

His comment reveals that Gabriel took an *Engage* orientation because he was encouraged to participate and contribute. Evidence of an *Engage* orientation was also found among those who appeared to have high status. Hence, members from numerous sites and nationalities expressed great interest in engaging with other plant locations. These members exhibited a sense of vitality and excitement about team participation. These findings suggest that the orientations to participate, and in particular the Engage orientation, transcend individual-level demographic characteristics. Rather, status differences were constructed through team practices and interactions.

Quantitative analysis. We turned to the content analysis of the conference call transcripts to more systematically assess these relationships. We first examined attendance rates and turns at talk in the conference calls. Analysis of variance indicated that mean attendance on calls differed significantly across teams (F (8, 28) = 14.15, p < .001, η_p^2 = .863), with attendance rates by those invited to attend ranging from 16% in some teams to 56% in others. In terms of turns at talk (TaT), the minimum was 0, the maximum 103, and the mean TaT was 12.52 (SD = 18.86). Next, we conducted analysis of variance (ANOVA), with TaT as the dependent variable. We examined the facilitator role (i.e., whether a person was a facilitator), country (where a person worked), and the person's team as potential predictors. Being a facilitator was associated with a significantly higher TaT (F(1, 200) = 145.14, p < .001; = .421), but a member's location was not a significant predictor of TaT (F(5, 200) = 1.98, p = .084; = .047). Importantly, the team variable was significantly associated with TaT, when controlling for whether a

member was the facilitator (F(1, 200) = 2.45, p < .05; = .089). This suggests that team practices shaped participation more than factors of role in the team, language, culture, or location.

Next, using numeric codes to represent the demographic characteristics associated with status differences (culture, language, and regional location) and the quantitative measures developed using the IPA described above to characterize each individual's orientation on conference calls (Help, Learn, or Engage), we conducted several analyses to assess whether the demographic characteristics were associated with orientations to participation. None of these tests revealed any significant associations (detailed results available upon request). Specifically, none of the bivariate correlations were significant. An analysis of variance with all three demographic indicators predicting each orientation failed to suggest significant variance was explained by these indicators. Finally, simple t-tests for each indicator (e.g., comparing English proficient with those not proficient) and each orientation failed to show statistically significant differences based on any indicator. All of these analyses point to an important conclusion: the individual characteristics implicated in prior research on status did not explain the different ways participants viewed their role and status in the global teams, and – they were not associated with members' orientations to participation. We then turned to other factors that might be responsible for the development of the orientations to participation.

Team Level Findings

Confronted with the lack of evidence that demographic characteristics explained the emergence of the orientations to participation (Help, Learn, or Engage), we turned to the team level to explore how team activity might account for these orientations, as well as the implications of the orientations for global team effectiveness.

Qualitative Evidence

Below we describe each of the four practices that we identified using the coding process described earlier. These were emergent interaction processes consistently evidenced within teams; these practices differed across teams. And as we demonstrate below, these practices were associated with the orientations to participation.

Relationship-building across sites. The first category of practices emphasized building trusting relationships across locations between high and low status subgroups. Doing so promoted informal, social conversation in calls among members across sites, cultures, and languages. These practices focused on facilitating connectedness across sites and included cross-site dialogue to help open up lines of communication between members on and off the calls:

Familiarity and ease, I think, are two of the key things that will promote active participation by engineers at various sites in the community of best practice. You have to associate, party with, if you like, have some social and personal contact and build some kind of a personal relationship with each of these people and with each other, these people amongst each other, before there's the ease and perhaps a development of some trust, not only in the technical advice that they're exchanging but how that information is going to be received. (Australia, Team Amalgam)

This assessment reveals the benefits of establishing personal relationships across locations. While this was facilitated by in-person socializing during on-site events, it was also reflected in calls in which there was more conversation between sites. This practice helped build trust and openness between what might have been high and low status subgroups (based on demographics), which improved acceptance of advice and information:

And so that's ... that I think helps the ... I guess, the smooth flow of dialogue. If people have established that rapport with each other, it's much easier to say, 'Well, hang on a sec. I'm not sure I understood the point he was trying to make there. Can you just go over that for me one more time?' (Australia, Team Ore)

As this statement shows, the trust and rapport built through improved communication across groups served to level status differences and promote participation. This was evident in the reaction of a member who might have otherwise had lower status based on demographic characteristics: "I really like this kind of team discussion because they try to put all members and all plants at the same level, and there is a higher level, so everybody tries to improve their process to achieve a better target."

Facilitators often tried to increase dialogue among members at various sites to build bridges within the team and foster collaboration. As one put it, he sometimes deliberately refrained from giving people answers in an attempt to get them to contribute and co-create knowledge. Part of this style of facilitation included securing buy-in from team members so that they felt invested in team problem solving and work:

I think it does because [team facilitator] prioritizes ... works out what people should be working on, involves ... he goes to a lot of trouble to engage people and really once you've got all the right people and you're working on the right things, people want to be part of it; they want to do it because it's their problem. (Australia, Team Amalgam)

A final practice that helped to build relationships across sites was to secure input that involved surfacing taken-for-granted assumptions. As one interviewee commented:

You know, you can talk about something, 'Well I don't want to talk about that. That's, everyone knows that.' But does everyone know it? We all assume so much about a topic; you think, 'No one's interested in that.' But you might start talking, 'Oh, is that right? Never heard of that,' you know. And you can be quite surprised sometimes what comes out of some of those things. (Australia, Team Pipe)

This comment highlights the value in discussing even mundane or trivial topics or in sharing information across sites assumed to be common knowledge. Given the diversity of knowledge and experiences across sites and groups in global teams, something taken for granted at one site might be unknown or misunderstood at another. In this sense, willingness to question assumptions and challenge premises was a way to elicit differing opinions and perhaps hidden knowledge. Overall, such practices helped reduce status differences by establishing that *all* members had valuable contributions to make.

Input-inviting practices. The second category of practices included successful efforts to create equal participation opportunities for members. This began with soliciting agenda input from all locations well in advance. At the start of the calls, an effective practice by Engage-oriented facilitators was to introduce all speakers and identify their refinery affiliation. This acknowledgement and explicit introduction served an overt purpose of notifying all participants of who was on the call, but its underlying interactional goal of socializing all the members proved vital for initial engagement. The "small talk" that took place during these introductions helped create the comfort zone necessary for engaged participation by all participants during the call. We found that participants who spoke once in

introducing themselves were more likely to participate later in the call. A more extended introduction of new team members that included details about the person's background and experience encouraged other members to engage with them further.

Throughout the calls, facilitators and members who posed questions for specific participants were often met with more engagement: "Okay. Mike at [refinery], what are the key topics of interest for you? And [your refinery] ... Excellent. Thanks Mike. Lucas, [another location]?" This strategy ensured that each location had an opportunity to interact, which was vital to communicating the importance of each site's contribution to the development of engaged participation within the team. Posing individually targeted questions and mentioning a person by name (as well as referencing the location) highlighted a site's participation and allowed participants to connect during the call as well as outside of it. Doing so required careful thought and advance preparation by the facilitator. As one facilitator commented:

Yeah, so I have a list of everyone that's on the call, and when I ask questions I try to tailor the questions to each, each refinery; sometimes there are multiple people from each refinery on the call, so I make a decision based on where I think the, the question would best apply to, and then try to relate the concepts that are being spoken about to their circumstance. So, I need to have knowledge of their particular circumstance and experience. So, if I, if I don't, then it's really hard to ask a question that doesn't require a specific answer. Because there's no point asking a question if you're not gonna get some information. (Australia, Team Amalgam)

This quote illustrates that the facilitator knew who was on the call and was adept at inviting input through personalized questions as well as efforts to foster dialogue among members across sites.

Structure-enabling practices. While input-inviting practices referred to the interpersonal practices during calls, structure-enabling practices referred to call structures (set up in advance) that promoted equal participation and multiparty interaction. First, providing structure through regular calls, established and clear agendas, a strict and focused use of time, and post-call follow-up gave team members a sense of predictability and role clarity about the purpose of the team and reason for the calls. First, sending out a clear agenda in advance helped to structure the calls. One team member discussed the importance of distributing the agenda and being disciplined enough to adhere to it throughout the call:

So they send the agenda previously to everybody to know what to talk...what we'll be talking about, so when you come to the [meeting] everything is scheduled, and we just pass through it. And there is lots of care about time. Sometimes...some people think to take longer than should, and there is this kind of control to follow the agenda the best way that's possible. (Brazil, Team Amalgam)

In teams without this kind of structure, on the other hand, calls were less frequent, less regular, and often canceled or rescheduled at the last minute. Such teams often lacked prepared agendas or followthrough on action items discussed in the call. As one team facilitator conceded on a call, "I haven't given people too much time to prepare for this. In fact I sent out the agenda literally about an hour ago."

A second effective practice was planning for prepared presentations on specific topics and rotating them across locations. This contrasted with teams in which the facilitator did not assign members advance preparation or plan what to discuss on the calls, which usually resulted in the facilitator dominating the conversation and providing one-way status updates. Allowing members from different sites to deliver presentations made them responsible for the content of the meetings and the knowledge produced, as well as allowing for more dialogue across sites. The following comment illustrates how allowing time for dialogue and discussion helped to give voice to those who might otherwise have been considered lower status based on demographics:

It's easy to share knowledge, because we have the space to do it. And I never saw some kind of a resistance to update something. So I believe it's okay. It's ... the basis to have sort of voice, have ... it's room to be open to new ideas, to think out the parts. And I think it's ... this kind of thing is it's integrated. (Brazil, Team Amalgam)

Finally, structure-enabling practices included post-call follow-up that provided a sense of continuity to team members, as this member noted:

I was impressed to see the participation of folks, which means the topics, so the agenda was pretty well laid out; and also the talks that were chosen is important also for a call. I think the follow-up, you know, is something interesting ... so that you can make those calls sort of a continuous type of thing, so that you are following what the path [is] that you are taking, all right? (Brazil, Team Amalgam)

As this comment reveals, structure was needed not just within a given call, but between calls as well to help create and maintain a sense of team continuity and its purpose. This helped overcome status

differences by making members who might have been considered lower in status feel they were meeting objectives in a structured way and assessing their achievements over time. Overall, structure-enabling practices helped overcome what could have been considerable status differences by acknowledging the importance of the knowledge of all locations, by fostering a two-way co-creation of knowledge, and by creating a sense of continuity.

Energy-enhancing practices. Finally, energy-enhancing practices were the key to creating a sense of vitality and excitement about the work of the team. As a Brazilian member of one of the most active teams said, "the calls are always full, and always have some work to present, always have something up-to-date. So it's always running, running, running." Similarly, a team member from Jamaica spoke of keeping the team "live" and useful for all members. This "always running" or "live" characterization reflects a sense of energy and vitality that invigorated team members.

Stimulating calls helped engage team members from all locations, but engagement could be a challenge because team participation was unpaid and expected above and beyond participants' main job responsibilities. Team practices that infused members with energy were effective in motivating participation:

I feel energized, yes. It's, it's really nice to bring some, some ideas outside the plant and trial here and implement. Sometimes I need to, to adapt some, some stuff and, and it's really good...to come to share and to transfer, yeah. And to be recognized doing that. It is really important, yeah. (Jamaica, Team Amalgam)

Finally, presenting things in a way that provoked team members to "expose themselves" and discuss and debate their views energized them and helped bridge high and low status subgroups. A final comment illustrates this as well:

Right and more immediate, you know, some others on the other side of the call, of the phone; and in this opportunity, the way that [team facilitator] is doing it, it's making them to present things, expose themselves and generate a good, healthy energy around this thing. (Brazil, Team Amalgam)

In contrast, one of the teams was on the verge of collapse, as reflected in the following comment by a member during the final teleconference call of the team: "Well, you know, as I looked at the presentation here and looked at what it takes to keep a team alive, I thought it would be difficult to keep this one alive. It seems like a push. Not that I'm not interested, just that I think we have to find more common ground or common areas." This reaction illustrates the important, literal sense of being "alive" that some of the teams lacked.

Overall, qualitative data indicated that the RISE practices helped to neutralized status differences and foster an *Engage* orientation to participation, and to some extent a *Learn* orientation.

Quantitative analysis. Next, we turned again to the IPA coding of conference calls (described earlier). Using the IPA quantitative scores, we computed the mean of the individual scores in the team on each practice and each orientation to participation, reflecting the central tendency in the team on that variable. We then conducted correlations among the team practices and orientations at the team level (see Table 7). We found that RISE practices were indeed differentially associated with *Help*, *Learn*, and Engage orientations. None of the RISE variables were significantly positively associated with a Help orientation; input-inviting practices actually had a strong negative association with the Help orientation (rho = -.72, p < .01). This suggests that teams in which specific members were invited to provide input were less likely to be characterized by a *Help* orientation. Two of the RISE practices, relationshipbuilding across sites (rho = .82, p < .01) and input-inviting (rho = .82, p < .01) were positively associated with a *Learn* orientation. These two practices, relationship-building across sites (rho = .62, p < .05) and input-inviting (rho = .68, p < .05), were also positively associated with an *Engage* orientation.

To answer RQ3 (How are the orientations to participation related to team effectiveness?), we ran correlations among the IPA quantitative scores on the orientations to participation and team effectiveness, as shown in Table 7. Only the *Engage* orientation was positively related to team effectiveness (rho=.68, p<.05). The *Help* orientation was negatively correlated with effectiveness (rho= -.78, p<.01). While these findings are only preliminary due to the small number of teams, they do suggest a promising path forward in terms of the efficacy of certain orientations to participation and the implications for global team effectiveness.

[INSERT TABLE 7 HERE]

Discussion

This study expands our understanding of how status differences shape participation in global teams. Our multilevel, mixed-methods analysis of conference calls and interviews identified three different orientations to participation (Help, Learn, and Engage). Specific team practices (relationship building across sites and input solicitation) helped to promote certain orientations (*Learn* and *Engage*); the Engage orientation in particular was associated with team effectiveness. This study extends prior research that focused largely on factors such as language, culture, and location as hindrances to global teams' success. Rather, we found that orientations toward participation emerged through global team interaction and communicative conditions that helped to overcome individual status differences. See Figure 1 for our emergent theoretical framework. Our findings have implications for theory and practice.

[INSERT FIGURE 1 ABOUT HERE]

Implications for Theory

The insights our analyses revealed have important theoretical implications for research on participation in global teams, and more broadly, on global organizations, in three areas. First, although there was some evidence for the impact of individual-level status differences, our findings do not support reifying status; rather, status differences are dynamic and intersectional features of global team interaction that are malleable and shaped by team communication practices. Second, we call attention to the importance of team-level practices pertaining to building relationships across sites and soliciting input, for encouraging participation in global teams. Third, we demonstrate how engaged participation, which involves bidirectional exchanges among members, is positively associated with global team effectiveness.

Status differences as dynamic and interactive. Due to the intersection and complexity of location, culture and language-based status characteristics, the implications of these factors for participation in the global teams in our study was not as clear as has been implied in prior research (e.g., Aritz & Walker, 2009; Neeley, 2013). Instead, our findings suggest that status differences are socially

constructed and thus malleable and can be overcome with team communication practices promoting engagement. For instance, although among some team members, the Australian cultural tendency to be direct co-existed alongside a Help orientation, this was not true for all Australians. Members from countries culturally less assertive such as Jamaica and Brazil sometimes tended to exhibit a more passive Learn orientation, but there were many exceptions to this. And members from both high and low status groups based on demographics exhibited an *Engage* orientation.

Further, presumed status differences based on individual characteristics did not coincide with how status played out in terms of the orientations to participation in the conference calls. Our IPA analysis did not reveal any statistical association between the individual status characteristics of location (high regarded refineries versus low regarded refineries), language (high versus low English proficiency), and culture (high context versus low context) and the orientations to participation. These findings reinforce the structurational interplay between situated interactions and identity structures that members bring to the team (Scott, Corman, & Cheney, 1998). Thus status differences are neither given nor fixed; they may initially signal one's relative influence and role in the group, but these signals can be reinforced or reshaped through interactions.

Our findings show that status is neither stable nor deterministic, but dynamic and constituted by communication practices that shape when and how it becomes salient. Thus, our findings extend prior research that recognizes the dynamic and shifting nature of status in global collaboration (Levina & Vaast, 2008; Metiu, 2006; Neeley, 2013; Neeley & Dumas, 2016) by examining how status differences develop and are surmounted in global team participation. Our findings also suggest that participation is more the product of dialogic communication practices than of individual influences. This extends work on dialogue (Bakhtin, 1986; Barge, 2002; Buber, 1998) into virtual contexts that lack socioemotional and visual cues and shows that dialogic practices can be meaningfully enacted in such settings.

Participation as shaped by relationships. Although participation has often been studied as a mediator or outcome variable (e.g., Paul, Samarah, Seetharaman, & Mykytyn 2005; Rains, 2005), our

study reframes it as an active, discursive relational process that is constitutive of the team. Taking a constitutive approach (Gibbs et al., 2008; Mokros, 1996; Putnam & Nicotera, 2009) allows us to better understand the ways in which practices guide team interaction, and in turn shape participation. Team practices enable team members to understand their role in the team, an understanding that influences their subsequent participation. This theoretical approach calls our attention to meetings as communicative spaces in which cultural and organizational dynamics are visible through turn taking and patterns of interaction. This view examines discursive practices such as forming trusting relationships and negotiating identities that "constitute the very core of teaming as a communicative accomplishment" (Gibbs et al. 2008, p. 204). This view thus reframes notions of participation as a mediator or outcome variable (see e.g., Fjermestad, 2004; Rains, 2005) and regards it as an active, dynamic, communicative process that is constitutive of the team.

Further, we place particular emphasis on dialogue as a form of interaction distinct from other forms such as conversation or discussion, with an emphasis on interactants' growth in a way that relies on but surpasses simple exchange. Dialogic communication brings to the forefront the importance of cocreation of meaning via an open connection of multiple voices (Bakhtin, 1986). For team members, such communication allows for the voicing and probing of complex views of self and others (Barge, 2002), which also better reflects an intersectional view (Collins & Bilge, 2020). Dialogic communication practices are those that not only invite participation, but also are responsive and sustainable (e.g., questions, constructive feedback, calls for reflection), build relationships, and increase identification with team members (Barge & Little, 2002).

In particular, relationship building across-sites and input solicitation was associated with the Engage and Learn orientations. When teams engaged in these practices, their active shaping of the communicative environment allowed for dialogic moments to ensue and helped reduce status differences. Dialogic moments are instances of interaction in which interactants are able to be their authentic selves while remaining open to the experiences of others in a state of shared mutuality, which "presumes a

respect for others that includes confirmation and the willingness not to impose one's beliefs or standards, but does not presume power parity" (Hammond, Anderson, & Cissna, 2003, p. 141). On the other hand, the Help orientation was negatively associated with dialogic communication practices. This orientation perpetuated status differences and further precluded the occurrence of dialogic moments and the experience of mutuality.

Knowledge processes as more than deposits and withdrawals. Finally, our findings exemplify the limitations of an information transmission perspective, indicating that orientations aligned with such a perspective may amplify status dynamics in global teams, and reduce team effectiveness. For example, those with a *Help* orientation often assumed a more empowered, higher status position, and they viewed the teams as repositories to which they made deposits of knowledge. While the *Learn* orientation has some dialogic features in terms of seeking input from others, it also involves a one-way flow of knowledge in which lower status members viewed the teams as repositories from which they made withdrawals. In fact, we selected the code labels Help and Learn specifically to make the point that although these processes tend to be regarded as exclusively positive, our findings reveal that they can both have downsides if they are one-directional. These code labels also reflect the participants' native wording in describing their team participation. For example, ethnocentric team members may say "I was just trying to help" while being oblivious to the actual needs of other members as well as how they might benefit from learning from others on the team. In contrast, teams high on the Engage orientation were the most balanced in terms of power dynamics and out-performed the other teams, based on the expert ratings provided by the Global Knowledge Manager who had comprehensive exposure to the performance of the teams. These insights extend the work of scholars such as Murnighan and Conlon (1991) who found that string quartet members who were highly attuned to one another were more successful, suggesting that "the ability to listen and respond to each other was the most important characteristic that differentiated quartet players from soloists" (p. 165). Although groundbreaking in its focus on actual interactions in teams, acknowledging the limitations of "give and take" exchanges and the status dynamics that

accompany them, as we do here, may have provided for additional revelations in their context.

Our findings also help to explain the empirical link between engagement and global team effectiveness. A necessary component of meaning-engagement practice, which is characterized by ongoing, recursive awareness of context, is reflection-in-practice (Schön, 1987). Such awareness and reflection characterized the most successful teams in our study. They were involved in ongoing experimentation as they created social interactional structures that responded to the changing circumstances of context and the multiplicities of interactants' identities. Again, these revelations illuminate aspects of interaction that help explain findings in prior research. For example, Okhuysen and Eisenhardt (2002) found that interventions that encouraged members to question others and better manage their time led to richer interactions and in turn improved knowledge integration in groups. Although their focus was on the timing and implementation of the intervention, our theory of participation as meaningengagement practice suggests that the richer interactions motivated members to put forth the extra effort required for successful knowledge integration.

Implications for Practice

Our findings have practical implications for managers of global teams by suggesting concrete practices they can use to encourage members from different locations and cultures to speak up and participate. We show that dialogic team communication can help overcome status differences that might otherwise plague a team. Further, emergent orientations that arise in interaction and through specific practices have more to do with shaping participation and effectiveness than do proclivities associated with location, language, culture-based status (which are arguably difficult to manage). Our findings also highlight the subtlety of ethnocentrism and how even the best-intentioned managers and organizational members (such as those with the Help orientation) may inadvertently disparage or discount the views of others and perpetuate status differences. However, they also suggest that team facilitators play a key role in developing practices that foster engagement to enable global teams to overcome potential status differences and other knowledge-sharing challenges. We find that facilitators, despite the challenges

associated with global virtual meetings, can make a big difference by establishing dialogic practices that build rapport and trust as foundational to relationships across sites and invite input from all members.

Limitations and Implications for Future Research

This study has several limitations. First, it includes only teams that held conference calls during the study period. Thus, the data may over-represent some teams and some locations. Nevertheless, our conference call transcripts were an invaluable source of insight. Despite the difficulty of gaining access to meetings, we urge scholars of team interaction to do so because reflection and retrospective sensemaking during interviews may introduce selective understandings that only become clear by observing real-time interactions. For example, we might have missed the subtle power dynamics inherent in the Help, Learn, and Engage orientations and their implications for team effectiveness had we relied just on the interviews or utilized a survey-based approach. We encourage future research to systematically examine a larger sample of diverse teams to confirm the unique features of the three orientations.

Our focus on conference call participation did not allow us to examine participation in other media (discussion forums, email, or social media) or the extent to which various orientations to participation were enacted in other media. We chose to focus on conference calls because they were the main form of team communication, and our site visits and interviews revealed that participation in other media was quite low (other than one-on-one emails and phone calls). Future research should investigate the role of other media in team participation patterns. Our results indicate the importance of collaborative knowledge exchange as opposed to dyadic transmission, which may be more characteristic of other media such as email or text. Examining whether the Engage orientation could develop through other media that carry different affordances (Leonardi, 2011) would be a welcome and important extension of our study.

Finally, to maintain a parsimonious scope, we focused on developing our understanding of the concept of orientations to participation and the role of team practices in promoting engagement and effectiveness. We strongly encourage research that elaborates on dialogic communication practices that may facilitate participation and engagement and other ways of overcoming barriers to inclusive team

participation and the ways they intersect with features of virtuality (Gibson & Gibbs, 2006) that were largely held constant in the teams in this study, such as task structure or degree of diversity. Such research might also investigate whether these features interact with the practices we identified.

In conclusion, this study extends our understanding of participation in global teams. It calls our attention to the role of team practices in emergent orientations to team participation and their implications for overcoming status differences that might otherwise exist in order to promote team engagement and effectiveness. Encouraging engagement is vital for enabling global teams to reach their potential because it helps ensure that expertise and input from all members are represented and shared.

References

- Anthias, F. (2009). Translocational belonging, identity and generation: Questions and problems in migration and ethnic studies. Finnish Journal of Ethnicity and Migration 4(1), 6–16.
- Anthias, F. (2013). Hierarchies of social location, class and intersectionality: Towards a translocational frame. International Sociology, 28(1), 121-138.
- Aritz, J., & Walker, R. C. (2009). Group composition and communication styles: An analysis of multicultural teams in decision-making meetings. Journal of Intercultural Communication Research, 38, 99-114.
- Bakhtin, M. M. (1986). Speech genres and other late essays. In V. W. McGee (trans). Austin, TX: University of Texas Press.
- Bales, R. F. (1950). Interaction process analysis: A method for the study of small groups. Reading, MA: Addison-Wesley.
- Bales, R. F., Strodtbeck, F. L., Mills, T. M., & Roseborough, M. E. (1951). Channels of communication in small groups. American Sociological Review, 16, 461-468.
- Barge, J. K. (2002). Enlarging the meaning of group deliberation. In L. R. Frey (ed.). New directions in group communication (pp. 59-78). Thousand Oaks, CA: Sage.
- Barge, J. K., & Little, M. (2002). Dialogical wisdom, communicative practice, and organizational life. Communication Theory, 12, 375-397.
- Berdahl, J. L., & Martorana, P. (2006). Effects of power on emotion and expression during a controversial group discussion. European Journal of Social Psychology, 36, 497-509.
- Berger, J., Cohen, B. P., & Zelditch, Jr., M. (1972). Status characteristics and social interaction. American Sociological Review, 37, 241-255.
- Berger J, & Fisek, M. H. (2006). Diffuse status characteristics and the spread of status value: A formal theory. American Journal of Sociology, 111, 1038-1079.
- Bonito, J. A., Keyton, J., & Ervin, J. N. (2017). Role-related participation in product design teams: Individual- and group-level trends. Communication Research, 44, 263-286.
- Bourdieu, P. (1984). Distinction: A social critique of the judgment of taste. In R. Nice (trans.). Cambridge, MA: Harvard University Press.
- Clyne, M. (1994). Intercultural communication at work: Cultural values in discourse. Cambridge, UK: Cambridge University Press.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. Educational and Psychological *Measurement*, 20(1), 37–46.
- Collins, R. (2004). Interaction ritual chains. Princeton, NJ: Princeton University Press.

- Collins, P. H., & Bilge, S. (2020). *Intersectionality*. John Wiley & Sons.
- Cramton, C. D., & Hinds, P. J. (2014). An embedded model of cultural adaptation in global teams. Organization Science, 25, 1056-1081.
- Cramton, C. D., & Hinds, P. J. (2005). Subgroup dynamics in internationally distributed teams: Ethno-centrism or cross-national learning? Research in Organizational Behavior, 26, 233-265.
- Dibble, R., & Gibson, C. B. (2013). Collaboration for the common good: An examination of challenges and adjustment processes in multicultural collaborations. Journal of Organizational Behavior, 34, 764–790.
- Drew, P. (2005). Conversation analysis. In K. L. Fitch and R. E. Sanders (eds.), Handbook of language and social interaction (pp. 71-102). Mahwah, NJ: Lawrence Erlbaum.
- Dube, L., & Pare, G. (2001). Global virtual teams. Communications of the ACM, 44(12), 71-73.
- Earley, P. C., & Gibson, C. B. (2002). Multinational teams: A new perspective. Mahwah, NJ: Lawrence Earlbaum Associates.
- Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), Handbook of social psychology (p. 941–982). John Wiley & Sons, Inc.
- Fjermestad, J. (2004). An analysis of communication mode in group support systems research. Decision Support Systems, 37, 239-263.
- George, G., Dahlander, L., Graffin, S. D., & Sim, S. (2016). Reputation and status: Expanding the role of social evaluations in management research. Academy of Management Review, 59, 1-13.
- Gibbs, J. L. (2009). Dialectics in a global software team: Negotiating tensions across time, space, and culture. Human Relations, 62, 905-935.
- Gibbs, J. L., Boyraz, M., Sivunen, A., & Nordbäck, E. (in press). Who is this "we"? Exploring the discursive functions of subgroups in global teams. Journal of Applied Communication Research.
- Gibbs, J. L., Nekrassova, D., Grushina, Y., & Abdul Wahab, S. (2008). Reconceptualizing virtual teaming from a constitutive perspective: Review, redirection, and research agenda. In C. S. Beck (ed.), Communication Yearbook 32 (pp. 187-229). New York: Routledge.
- Gibson, C. B., Dunlop, P. D., & Cordery, J. L. (2019). Managing formalization to increase global team effectiveness and meaningfulness of work in multinational organizations. Journal of International Business Studies, 50, 1021-1052.
- Gibson, C. B., & Gibbs, J. L. (2006). Unpacking the concept of virtuality: The effects of geographic dispersion, electronic dependence, dynamic structure, and national diversity on team innovation. Administrative Science Quarterly, 51, 451-495.
- Glaser, B. G. (1992). Emergence vs. forcing: Basics of grounded theory analysis. Mill Valley, CA:

- Sociology Press.
- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine Publishing Company.
- Grushina, S. V. (2017). Collaboration by design: Stakeholder engagement in GRI sustainability reporting guidelines. Organization & Environment, 30, 366-385.
- Gwet, K. L. (2014). Handbook of inter-rater reliability (4th Ed.). Gaithersburg, MA: Advanced Analytics.
- Hall, E. (1966). The hidden dimension. New York: Doubleday.
- Hammond S. C., Anderson, R., & Cissna, K. N. (2003). The problematics of dialogue and power. Communication Yearbook, 27 (pp. 125-158). New York: Routledge.
- Hargadon, A. B., & Bechky, B. A. (2006). When collections of creative become creative collectives: A field study of problem solving at work. Organization Science, 17, 484–500.
- Harzing, A. W., & Feely, A. J. (2008). The language barrier and its implications for HQ-subsidiary relationships. Cross Cultural Management: An International Journal, 15(1), 49-60.
- Hinds, P. J., Liu, L., & Lyon, J. (2011). Putting the global in global work: An intercultural lens on the practice of cross-national collaboration. The Academy of Management Annals, 5, 135-188.
- Hinds, P. J., Neeley, T. B., & Cramton, C. D. (2014). Language as a lightning rod: Power contests, emotion regulation, and subgroup dynamics in global teams. Journal of International Business Studies, 45, 536-561.
- Hoegl, M., & Gemuenden, H. G. (2001). Teamwork quality and the success of innovative projects: A theoretical concept and empirical evidence. Organization Science, 12, 435-449.
- Hofstede, G. (2001). Culture's consequences (2nd ed). Thousand Oaks, CA: Sage.
- Jay, J. (2013) Navigating paradox as a mechanism of change and innovation in hybrid organizations. Academy of Management Journal, 56, 137-159.
- Kakavelakis, K. (2010). A relational approach to understanding knowing in communities of practice. *Knowledge and Process Management, 17*(4), 168-179.
- Keyton, J. (2003). Observing group interaction. In R. Y. Hirokawa, R. S. Cathcart, L. A. Samovar, & L. D. Henman (eds.), Small group communication: Theory and practice (8th ed.) (pp. 256-266). Los Angeles: Roxbury Publishing Co.
- Kilduff, G. J., Willer, R., & Anderson, C. (2016). Hierarchy and its discontents: Status disagreement leads to withdrawal of contribution and lower group performance. Organization Science, 27, 373-390.
- Klaas, B. S., Olson-Buchanan, J. B., & Ward, A. K. (2012). The determinants of alternative forms of workplace voice: An integrative perspective. *Journal of Management*, 38, 314-345.

- Leonardi, P. M. (2011). When flexible routines meet flexible technologies: Affordance, constraint, and the imbrication of human and material agencies. MIS Quarterly, 35, 147-167.
- Levina, N., & Vaast, E. (2008). Innovating or doing as told? Status differences and overlapping boundaries in offshore collaboration. MIS Quarterly, 32, 307-332.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Newbury Park, CA: Sage.
- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. Academy of Management Annals, 2, 351–398.
- McCall, L (2005) The complexity of intersectionality. Signs: Journal of Women in Culture and Society, *30*, 1771–1800.
- Metiu, A. (2006). Owning the code: Status closure in distributed groups. Organization Science, 17, 418-435.
- Metiu, A., & Rothbard, N. P. (2013). Task bubbles, artifacts, shared emotion, and mutual focus of attention: A comparative study of the microprocesses of group engagement. Organization Science, 24, 455-475.
- Mokros, H. B. (ed.) (1996). Interaction and identity: Information and behavior (vol. 5). New Brunswick, NJ: Transaction.
- Mokros, H. B., & Aakhus, M. (2002). From information-seeking behavior to meaning engagement practice. Human Communication Research, 28, 298-312.
- Morrison, E. W., Wheeler-Smith, S. L., & Kamdar, D. (2011). Speaking up in groups: A cross-level study of group voice climate and voice. Journal of Applied Psychology, 96, 183-191.
- Murninghan, J. K., & Conlon, E. E. (1991). The dynamics of intense work groups: A study of British string quartets. Administrative Science Quarterly, 36, 165-186.
- Neeley, T. (2013). Language matters: Status loss and achieved status distinctions in global organizations. Organization Science, 24, 476-497.
- Neeley, T. B., & Dumas, T. L. (2016). Unearned status gain: Evidence from a global language mandate. Academy of Management Journal, 59, 14-43.
- Oetzel, J. G., & Ting-Toomey, S. (2003). Face concerns in interpersonal conflict: A cross-cultural empirical test of the face negotiation theory. Communication Research, 30, 599-624.
- Okhuysen, G. A., & Eisenhardt, K. M. (2002). Integrating knowledge in groups: How simple formal interventions enable flexibility. Organization Science, 13, 370-386.
- O'Leary, M. B., & Mortensen, M. (2010). Go (con)figure: Subgroups, imbalance, and isolates in geographically dispersed teams. Organization Science, 21, 115-131.

- Paul, S. I., Samarah, M., Seetharaman, P., & Mykytyn, P. P. (2005). An empirical investigation of collaborative conflict management style in group support system-based global virtual teams. Journal of Management Information Systems, 21, 185-222.
- Pentland, A. (2012). The new science of building great teams. Harvard Business Review, 90, 60-70.
- Putnam, L. L., & Nicotera, A. M. (eds.) (2009). Building theories of organization: The constitutive role of communication. New York: Routledge.
- Rains, S. A. (2005). Leveling the organizational playing field virtually: A meta-analysis of experimental research assessing the impact of group support system use on member influence behaviors. Communication Research, 32, 193-234.
- Reese, J. (2017). An exploration of interactions between virtual mentors and preservice teachers. Contributions to Music Education, 42, 201-221.
- Rice, R. E., & Love, G. (1987). Electronic emotion: Socioemotional content in a computer-mediated communication network. Communication Research, 14, 85-108.
- Ridgeway, C. L. (1991). The social construction of status value: Gender and other nominal characteristics. Social Forces, 70, 367-386.
- Rosenthal, L. (2016). Incorporating intersectionality into psychology: An opportunity to promote social justice and equity. American Psychologist, 71, 474-485.
- Schön, D. A. (1987). Educating the reflective practitioner: Toward a new design for teaching and learning in the professions. San Francisco: Jossey-Bass.
- Scott, C. R., Corman, S. R., & Cheney, G. (1998). Development of a structurational model of identification in the organization. Communication Theory, 8, 298-336.
- Stohl C., & Cheney, G. (2001). Participatory processes/paradoxical practices: Communication and the dilemmas of organizational democracy. Management Communication Quarterly, 14, 349-407.
- Strauss, A., & Corbin, J. M. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.
- Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. Oualitative Inquiry, 16, 837-851.
- Woolley, A. W., Chabris, C. F., Pentland, A., Hashmi, N., & Malone, T. W. (2010). Evidence for a collective intelligence factor in the performance of human groups. Science, 330, 686–688.
- Zakaria, N., Amelinckx, A., Wilemon, D. (2004). Working together apart? Building a knowledgesharing culture for global virtual teams. Creativity and Innovation Management, 13, 15-29.
- Zellmer-Bruhn, M., & Gibson, C. B. (2014). How does culture matter? A process view of cultural interaction in groups. In M. Yuki and M. Brewer (eds.), Frontiers of culture and psychology series: Culture and group processes (pp. 166-194). Oxford, UK: Oxford University Press.

Table 1. Individual Characteristics

Interviewee	Team	Location	Refinery (RIG* or other)	Tenure at Company (yrs)	Position (member or facilitator)	Gender	Age	Nationality
1	Practice	USA	RIG	16-20	Facilitator	M	50s	American
2	Practice	Jamaica	Other	6-10	Member	M	20s	Jamaican
3	Ore	Australia	Other	16-20	Facilitator	M	50s	Australian
4	Amalgam	Australia	RIG	6-10	Facilitator	M	30s	Australian
5	Amalgam	Brazil	Other	21-30	Facilitator	M	50s	Brazilian
6	Amalgam	Australia	RIG	21-30	Member	M	60s	Australian
7	Amalgam	Australia	RIG	6-10	Member	M	30s	Australian
8	Amalgam	Australia	RIG	6-10	Member	M	40s	Australian
9	Amalgam	Australia	RIG	6-10	Member	M	40s	Australian
10	Amalgam	Jamaica	Other	1-5	Member	M	30s	Jamaican
11	Amalgam	Jamaica	Other	1-5	Member	M	20s	Jamaican
12	Amalgam	Jamaica	Other	6-10	Member	M	30s	Jamaican
13	Amalgam	Australia	RIG	6-10	Member	M	50s	Australian
14	Amalgam	Australia	RIG	11-15	Member	F	30s	Singaporean
15	Amalgam	Australia	RIG	6-10	Member	M	30s	Australian
16	Amalgam	Brazil	Other	1-5	Member	M	20s	Brazilian
17	Amalgam	Brazil	Other	1-5	Member	M	20s	Brazilian
18	Cap	Australia	RIG	11-15	Facilitator	M	30s	Australian
19	Cap	Jamaica	Other	1-5	Member	M	30s	Jamaican
20	Cap	Brazil	Other	1-5	Member	F	20s	Brazilian
21	Tool	Brazil	Other	6-10	Facilitator	M	40s	Brazilian
22	Tool	Australia	RIG	30+	Member	M	60s	Australian
23	Tool	Brazil	Other	1-5	Member	M	20s	Brazilian
24	Tool	Brazil	Other	1-5	Member	M	20s	Brazilian
25	Tool	Brazil	Other	1-5	Member	M	20s	Brazilian
26	Tool	Australia	RIG	16-20	Member	M	50s	Australian
27	Tool	Jamaica	Other	11-15	Member	M	50s	Jamaican
28	Tool	Australia	Other	16-20	Member	M	40s	Australian

Table 1. Individual Characteristics (cont'd)

Interviewee	Team	Location	Refinery (RIG* or other)	Tenure at Company (yrs)	Position (member or facilitator)	Gender	Age	Nationality
29	Flange	Australia	RIG	6-10	Member	M	60s	Australian
30	Flange	Brazil	Other	6-10	Member	M	30s	Brazilian
31	Flange	Spain	Other	1-5	Member	F	20s	Spanish
32	Pipe	Australia	RIG	11-15	Facilitator	M	40s	Australian
33	Pipe	Australia	RIG	16-20	Member	M	50s	Australian
34	Valve	Australia	RIG	21-30	Facilitator	M	50s	Australian
45	Valve	Brazil	Other	1-5	Member	F	20s	Brazilian
36	Valve	Brazil	Other	1-5	Member	M	20s	Brazilian
37	Valve	Brazil	Other	6-10	Member	F	20s	Brazilian
38	Valve	Suriname	Other	11-15	Member	M	40s	Surinamese
39	Valve	Australia	RIG	6-10	Member	M	30s	Brazilian
40	Valve	Jamaica	Other	6-10	Member	M	30s	Jamaican
41	Valve	Australia	RIG	11-15	Member	M	40s	Australian
42	Valve	Australia	RIG	16-20	Member	M	50s	Australian
43	Joint	Brazil	Other	6-10	Member	M	30s	Brazilian
44	Joint	Jamaica	Other	1-5	Member	M	30s	Jamaican
45	Joint	Jamaica	Other	6-10	Member	M	30s	Jamaican

^{*} RIG (Research & Innovation Group) is the regional HQ in WA

Table 2. Team Characteristics

Team	Facilitator Location	Total Members #	Interviews #	Interviews (transcript pages)	Calls #	Call time (total mins)
Team Amalgam	Australia	48	14	390	4	212
Team Cap	Australia	30	3	76	1	65
Team Flange	Australia	26	3	72	4	219
Team Joint	Australia	11	3	94	3	168
Team Ore	Australia	21	1	46	4	150
Team Pipe	Australia	35	2	94	3	152
Team Practice	USA	25	2	82	5	175
Team Tool	Brazil	32	8	216	1	47
Team Valve	Australia	32	10	316	2	122
Total			45	1,386	27	21 hrs 50 mins

Table 3. Orientations to Participation: Sample Quotes

Help	Learn	Engage
Definition: An expectation that participation in the team	Definition: An expectation that participation in the team	Definition: An expectation that participation in the team
is in order to contribute and share knowledge or best	is in order to gain new understanding of best practices	is in order to interact with the team on an ongoing basis
practices and solve problems	and solutions to specific challenges	to develop relationships, enhance meaningfulness and mutual benefits of work
Interviewer: So what do you think makes people want to	A lot of issues come up on site and people ask, people	I guess everybody now has a chance to talk. And in the
participate? Interviewee: I don't know. Myself, I can tell about	ask for solutions and a lot of times sometimes instead of me just trying to take or two or a day and a half to	past, a lot of people just disconnect in the middle of the call because they were not interested, and now I think
myself, but it's to interact and try to, to be recognized	bring up some solution, I can just ask somebody quickly.	the agenda is much more focused on the refinery
by the refineries. Doing that and trying to, to improve	I'm more, directly just sending emails is the best to	problems, so it's something that everyone in the call, at
the job, bringing new controls or new ideas for the	the person, and say 'Do you do this at your site?' and	least in one moment, will be participating. In the past it
company and, and share knowledge I guess. So it's	whatever you know. For me, most, for some reason and I	was just one of two plants talking and the other just
really good to share information and ideas and problems	don't know why most, Australia does everything, so I	listening. So I think this structure, it's much better and
and things. (Brazil, Team Valve)	just ask somebody from an Australian site what they've done, and I usually get the answers from them. (Jamaica,	it's increasing the engagement of the refinery people They need to do some work before the call and it
	Team Joint)	increases great engagement. (Brazil, Team Valve)
There's an avenue to start to spread the information that	For me, that feels like a cheat-sheet, you know, when I	And you need to understand their culture as well, and
I've accumulated in the past 40 years andmy boss and	can go and not have to base all my decisions on just, you	not Well, yeah, the things that they do, and just the
his boss won't let me retire until I've done the	know, book knowledge or past experience and whatnot	nature of their personalities, what they're comfortable in
dissemination of knowledge. (Australia, Team Tool)	and I can sort of, you know you know, it's like an	doing and saying, and not doing and saying. And just
	open book test – ask somebody else, you know, what the right answer is, you know. (USA, Team Plug)	yeah, not imposing myself at all, so it's basically being very open-minded about everything. And you do
	right answer is, you know. (OSA, Team Flug)	having gone from Brazil to Jamaica fairly quickly, if you
		go in and impose yourself and don't even try to
		understand, they just shut off, and they so they're not
		going to bother with you. (Australia, Team Valve)
But in that process of getting between, you know, over	I'm always trying to learn more in, you know, get better	As soon as you see the importance of a [team] you
that ten years, hopefully getting people to buy in and understand why they need to go to that and how much	and better, like a wine, a good wine, get better and better, you know, and more available to give what	always intend to be more a part of it. So at the beginning it's the curiosity to know what's happening, and then
support we can give them these days, especially with the	people and company expect from you, because they	you are you'll see that it's important that you can
electronic transfer, you can put a method on a thumb	expect you to grow. (Brazil, Team Tool)	share your work, you can share knowledge, you can
drive, put it into an email, and the guy's got it all at the		share experience, so you'll start to join a [team] and be
other end within, you know, minutes. (Australia, Team		more part of it you'll try to participate more. (Brazil,
Pipe)		Team Amalgam)
And, and we do get attendance. But it's certainly pushed	Because it's a place where you can, as I said, you can	I think one of the strengths of the [X Team] is [its
from this end. We, we book it, we try and help draw the agenda out, set the agenda, facilitate it, write the	find out a lot of information, which will be helpful for your whole career. (Brazil, Team Flange)	facilitator], because they have to get the whole group together and, and structure it in a way that encourages
minutes. So it's pretty much all from this end, at this	your whole career. (Brazii, Team Plange)	people to, talk and to share. And I think he does that,
stage. (Australia, Team Chain)		that really well. I think it starts there and he's, he's done
		that, everybody starts working together. (Australia,

		Team Chain)
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Table 4. Communication Practices that Promote Engagement: Sample Quotes

Energy-Enhancing Relationship-Building Across Sites Input-Inviting Communication Structure-Enabling That's [the designated team members'] And the thing is, you've gotta be able to Well, based on the feedback you get ... My team that I supervise and support, primary focus and that's aligned with the create a culture for people to feel confident from some of the persons on the call, again, they are highly engaged, motivated projects which they work in and their to share, as well. (Australia, Team you know, you would hear them say, and really enjoy what they're doing. area of expertise, and they serve as a Amalgam) 'Well, yes, you know, in our last They have a lot of good fun doing it, meeting you had recommended that we which is really important. Same again, I center point or a node for that correspondence and contact with the run this in this particular way and we think for the same reasons, they get Identifying the right people, getting them team. So they facilitate that global are now seeing the benefits of it.' personal success in their role. (Australia. involved and engaged, and participating contact rather than hoping that's going to (Jamaica, Team Amalgam) Team Amalgam) and talking to one another, and what I occur ... So, it's organized, rather than would call, doing some informal best hoping.(Australia, Team Amalgam) As a team becomes more integrated and And we always share with the plants practice transfer, which is not writing a potentially autonomous, it can be left to what are those best practices and the document that's, 'Well, we had a problem Trying to get everyone to gel onto the kind of its own path. But, application and the benefits. So I think and we did this,' or 'We've got a problem same page... And it's not just the the structure is what holds it together. we have to, all members have to maintain and we don't know what to do?' And Australians bashing the, you know, the (Australia, Team Ore) and try to keep the team live and useful another member jumping in and saying, table saying, 'You will, you will.' for everyone. (Brazil, Team Flange) 'Oh, have you tried this, because we did Everyone, it's getting people to a point So what I'm asking them to do is they this.' Or, you know, 'That's great that you where they'll engage and see that, break have to do a presentation on ... and they My coordinator at the moment called and did that, because we had the same down that barrier a bit. People will present a portion of the best practice and asked me if I wanted to be part of it, said problems three months ago and we didn't answer questions and part with we review it and we discuss what they it was really important to the knowledge, know how to fix it, and we'll do it next information. (Australia, Team Pipe) need to fix and where they're currently to learn and share knowledge, and to be time.'(Australia, Team Cap) at as far as their score. (Australia, Team part of something bigger that you can And so that's ... that I think helps the ... I share your work and have your work Joint) I even deliberately stop on some of the guess, the smooth flow of dialogue. If recognized. (Brazil, Team Amalgam) calls if I'm midway through a presentation people have established that rapport with I guess the systems we're using and say, 'I just want a comment from each each other, it's much easier to say, 'Well in terms of measurement and reporting, And these calls give us the opportunity to location on what you think about this.' hang on a sec. I'm not sure I understood and the frequency of dialogue, are all of share these informations and to receive (Australia, Team Ore) the point he was trying to make there. the things that I certainly try and focus some feedback that can help, and these Can you just go over that for me one on. (Australia, Team Ore) calls give us some update about research You know, every refinery's usually more time?'(Australia, Team Ore) and more theoretical things that generally represented on the call, on the conference I think it's the other difference like how we don't have so much time during the call. But that has been a deliberate effort, I Everybody's really friendly, even if you the team's organized and the day to go deeply. think, basically by [team facilitator] to I want to make the team something that is are a trainee and the person is senior. information you need so you go there make sure that everyone's included in and nice to be part of it, that I know that I will They always answer and are always open and like well-defined in structure involved in the conference call. The other to discuss and to help. (Brazil, Team instead of you have to go dig into tons grow and that I know that, also, it's fun [teams] maybe aren't as global. (Australia, Amalgam) of documents. (Brazil, Team Valve) to be there and really energetic and we Team Amalgam) are recognized as well. (Brazil, Team

Amalgam)

Table 5. Bales Code Frame

Code	Summary	Examples
1	Shows solidarity	greetings, achievements, appreciation "Hi," "Hello," "Good Morning," "I
	raises other's status, gives help, reward	appreciate that," "very good," "thanks very much," "how are you doing,"
		"appreciate this," "good point," "welcome"
2	Shows tension release	N/A
	jokes, laughs, shows satisfaction	
3	Agrees	yes," "yeah," "that's right," "I agree," "all good," "sounds good," "that's
	shows passive acceptance, understands, concurs,	fine," "okay," "that's good," "that's right," "no (when agreeing)"
	complies	
4	Gives suggestion	taking action, follow up, calls to action, "let's do something," "I propose we"
	direction, implying autonomy for other	"you need to have"
5	Gives opinion	"I think," "I guess," "it seems," "for me," "my view," "I forget," "probably,"
	evaluation, analysis, expresses feeling, wish	"maybe," "I am not sure"
6	Gives orientation	introduction, information "Jim here," "This is Jim," "This slide demonstrates"
	information, repeats, clarifies, confirms	"This is a graph of the refineries"
7	Asks for orientation	phrased in the form of a question, "Hello?" "Can you hear me?" "Can you
	information, repetition, confirmation	explain this to me?"
8	Asks for opinion	"What do you think?" "What is the best course of action"
	evaluation, analysis, expression of feeling	
9	Asks for suggestion	asks for comments, asks for closing/final thoughts
	direction, possible ways of action	
10	<u>Disagrees</u>	"No," "I don't think so," "I disagree"
	shows passive rejection, formality, withholds help	
11	Shows tension	apologizing, "sorry," "my apologies"
	asks for help, withdraws out of field	
12	Shows antagonism	NA NA
	deflates other's status, defends or asserts self	

Table 6. Overview of Analyses

Research	Level of	Data	Analysis	Codes or Measures
Question	Analysis	Source		
RQ1	Individual	Interviews	Qualitative	Excerpts inductively coded as Help, Learn, or Engage
	Individual	Conference	Bales IPA	Demographic characteristics
		Calls	Help = frequency count for occurrences of Bales categories 4, 5, 6	Turns at talk (TaT) during calls
RQ2			Learn = frequency count for occurrences of Bales categories 7, 8, 9	Score on Help, Learn and Engage orientations based on frequency of occurrence in calls
			Engage = ratio of Learn/Help	
	Team	Interviews	Qualitative	Excerpts inductively coded as Relationship-building, Input-inviting, Structure-enabling, and Energy- enhancing (RISE) team practices
	Team	Conference Calls	Bales IPA R = # of turns in which a TaT was followed by a TaT from different site	Team mean on Relationship-building, Input-inviting, Structure-enabling, and Energy-enhancing (RISE) team practices
			I = # times members addressed by name	Team Mean on Help, Learn and Engage orientations based on frequency of occurrences in calls
			S = use of formal presentations across sites	
			E = frequency count for occurrences of Bales categories 1, 2, 3	
RQ3	Team	Conference Calls	Bales IPA	Team mean on Relationship-building, Input- inviting, Structure-enabling, and Energy-enhancing (RISE) team practices
				Team Effectiveness Ratings obtained from Global Knowledge Manager

Table 7. Team-level correlations among orientations to participation, team practices and team effectiveness (n=9 teams)

	1	2	3	4	5	6	7
1. Help Orientation	1.000						
2. Learn Orientation	467	1.000					
3. Engage Orientation	533	.867**	1.000				
4. Relationship building across sites	350	.817**	.617*	1.000			
5. Input-inviting	717*	.817**	.683*	.567	1.000		
6. Structure-enabling	183	.365	.365	.639*	.365	1.000	
7. Energy-enhancing	.250	.250	017	.600*	.017	.456	1.000
8. Effectiveness	787**	.513	.675*	.308	.693*	.328	342

^{*}p<.05; **p<.01

Note: Shown are Spearman coefficients due to the non-parametric nature of the data and small sample of 9 teams.

Figure 1. Emergent Theoretical Framework

