



Cross-cultural perspectives on collaboration: Differences between the Middle East and the United States

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ABSTRACT

Cross-cultural collaboration is critical for tackling many complex issues of the modern-day, yet can be challenging, particularly when it includes collaborators with a history of conflict, such as Middle Eastern countries and the United States. To explore how collaborators might have unique conceptualizations of collaboration that could ultimately contribute to this challenge, this research leverages comparative structural analysis of interview data from 113 participants across four nations in the Middle East and the United States. Several key differences in conceptualizations emerged. Middle Eastern samples emphasized (1) who is involved, including a spiritual element, (2) interpersonal aspects, (3) higher levels of motivation, and (4) equality of resources, more so than American participants. However, not all conceptualizations were different. These cultures all agreed collaboration is challenging and requires effort to be successful. Findings provide important insights for informing future research, as well as practical approaches to managing cultural differences in collaborative settings.

1. Introduction

It is not uncommon to see headlines such as “Why the Middle East is More Combustible than Ever” (Malley, 2019) and “Middle East: Ever More Unstable...[seven Mideast conflicts, each one ever more intractable]” (Ben-Meir, 2020). When we hear about the Middle East, it is often focusing on conflicts within this region (e.g., Butler, 2002), rather than collaboration. To counter this climate, scientific collaboration has been highlighted as one way to build peace in this region (McGinley & Chamie, 2003). Yet collaboration in general can be challenging, and does not always transpire without issue. Contributing to the challenge is the fact that many collaborations occur across cultural boundaries, whether they be personal, organizational, or even national. It becomes even more complex if we are interested in enhancing collaboration not only within, but also across the Middle East (M.E.) and other nations, such as the United States (U.S.). Despite the challenges, cross-cultural collaboration is necessary, as it allows for varied perspectives, unique resources, and cooperative efforts to be enacted in combination as a means of tackling complex problems and business objectives (Gray, 1989). Even in these regions with a long history of conflict (i.e., the M.E. and the U.S.), the interest is there. For example, a number of

partnerships have been established across the United Arab Emirates -a country in the M.E.- and the U.S., including business, healthcare, sport, energy, and academic industries (Embassy of the United Arab Emirates, 2020). This highlights how the complex nature of societal issues, scientific advancement, business practices, etc. oftentimes require interactions and access to resources and/or networks from parties who are culturally diverse.

Collaboration is an essential process not only to address large-scale societal issues (Huxham, 1996), but everyday endeavors such as science (Hall et al., 2012) and medicine (Hughes et al., 2016) as well. Collaboration, when successful, can produce groundbreaking results such as new products (Schubert & Tavassoli, 2020), heroic rescues (Edmondson & Harvey, 2017), and humanitarian efforts (Dibble & Gibson, 2013). Accordingly, teamwork, and other forms of collaboration such as joint ventures, interorganizational coalitions, and strategic alliances have become foundational to the ability of the modern organization to maintain a competitive advantage (Bedwell et al., 2012). Furthermore, globalization and the increased adoption of technology has allowed for cross-cultural collaborations to become commonplace. Decades of research, however, reveals that people across cultures engage in processes such as teamwork (Gibson & McDaniel, 2010), conflict

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(Earley, 1994), and negotiation (Gelfand & Dyer, 2000) differently, potentially generating issues in collaborative settings. There is evidence that differences exist in media preferences, for instance, when engaging in collaboration across those from Asia and the U.S. (Setlock, Fussell, Ji, & Culver, 2009). As such, researchers are investing much attention toward understanding and facilitating cross-cultural collaborations (e.g., Salazar & Salas, 2013).

What this research is revealing is that when culturally diverse individuals bring different perspectives and social realities to their interactions, confusion and conflict can make it difficult for participants to understand how to behave and engage with one another. Differences in collaboration definitions, what motivates participation, the value placed on collaborative work, resources available to foster effective collaboration, and associated rewards (Erez & Somech, 1996) are all factors that can predict variation in how people think about collaboration, and can generate cultural misunderstanding. Uncovering these differences and similarities is critical to gaining theoretical insight into the emic and etic aspects of collaboration. Additionally, knowledge of how collaboration is construed within cultures may hold the key to identifying potential sources of breakdowns when people from different cultures come together to collaborate, which can be both costly and time-consuming.

Thus, the goal of this research is to contribute to an understanding of collaboration that takes culture into account. We extend the work of Gibson and Zellmer-Bruhn (2001), who identified differences across cultures in metaphors used to describe teamwork, by exploring differences in collaboration conceptualizations across a unique set of nations. Specifically, we compare the U.S. and four nations in the M.E., as these allow for a particularly salient examination of cultural differences due not only to the ongoing relevance of U.S.-M.E. relations, but also to the fact that the U.S. and M.E. countries tend to show marked differences in primary cultural characteristics. Further, conducting research in the M.E. counters a general tendency of researchers to focus on East Asian and diverse American student samples, shedding light on cross-cultural differences in an underrepresented context. While our overarching objective is to compare the U.S. and the M.E., particularly since past research has demonstrated cultural differences between these groups (e.g., Aslani et al., 2016; Gelfand et al., 2015), we recognize meaningful differences have also been observed within the M.E. (Ralston et al., 2012). Thus, rather than assuming the M.E. samples will conceptualize collaboration similarly and treating them as a homogenous group at the outset, we begin by allowing comparisons to be made both within the M.E., and across the M.E. and the U.S.

We aim to contribute to the development of a truly global science of collaboration which can be expanded to include constructs relevant in the M.E. In line with calls to use qualitative methods to examine cross-cultural differences (Feitosa, Grossman, & Salazar, 2018), this research seeks to answer the question, “What is collaboration?” across nations by leveraging a qualitative, open-ended approach. Our starting point is a multinational study (i.e., interviews) of the values, norms and beliefs of community samples to capture local collaboration conceptualizations. We then use a deductive approach to test for statistical differences across nations. Given the nascence of theory about collaboration in the M.E., this qualitative approach is appropriate for developing new understanding (Edmondson & Mcmanus, 2007). Further, we leverage comparative content analysis of interview data to provide more direct tests of cross-cultural equivalence and differences (Hui & Triandis, 1983). Though we start from a generic definition of collaboration, we aim to identify culture-specific conceptualizations across nationally-diverse samples by utilizing both top-down and bottom-up qualitative methods. While an emerging body of research provides insight about the processes through which performance can be affected in the context of cross-cultural collaboration (e.g., Stahl, Maznevski, Voigt, & Jonsen, 2010), we take a step back to explore foundational differences in conceptualizations of collaboration in general, even before one enters a cross-cultural collaboration setting, which might help explain why such processes (e.g., conflict) occur. Uncovering how representations of

collaboration differ across countries has potential to expand our comprehension of joint work between people, which is the focus of this research, and may ultimately help inform understanding of collaboration between groups, organizations, and nations as well.

2. Theoretical background

Below, we provide an overview of the theory underlying our exploration of collaboration across cultures. While we draw from an existing, western-based framework of collaboration as a reference point for theorizing about expected differences, our grounded analytic approach allows us to deviate from this framework in analyses to examine themes as they naturally emerged. Past research provides a cognitive explanation for variation in conceptualizations of teamwork across cultures (Gibson & Zellmer-Bruhn, 2001). The authors revealed differences in definitions and metaphors people from different nations use to describe teamwork, and suggest that distinct representations shape how people approach working in teams cross-culturally. Given this likelihood, we do not put forth specific hypotheses, as we could not anticipate precisely how collaboration descriptions would take shape, but propose high-level predictions about the types of distinctions we expect to observe. We provide an overview of cultural factors that have shown to produce important distinctions in past research (Gelfand, Erez, & Aycan, 2007), and use them as a theoretical foundation for explaining anticipated differences.

2.1. Collaboration

Collaboration research has a rich history, though because it spans a range of fields, researchers have long struggled to reach consensus on a universal, agreed upon definition. In response to this inconsistency, Bedwell et al. (2012) conducted a comprehensive, multidisciplinary review and generated a conceptualization of collaboration – *an evolving process whereby two or more social entities actively and reciprocally engage in joint activities aimed at achieving at least one shared goal* – which integrates these domains. By specifying that social entities can refer to individuals, units, departments, functional areas, organizations, or even societies, their definition recognizes collaboration is not limited to individuals, but can also include higher level entities. Underlying this definition are several themes that emerged as core elements of conceptualizations of the collaboration process: (a) *an interpretation of the social entities, or who is involved in the collaboration and the nature of their relationship*; (b) *an understanding of the joint task or activity and the reciprocal nature of collaboration*; (c) *the definition of the objective shared by the parties involved and the motivation for achieving it*; and (d) *representation of how the collaborative process changes over time*. Given their comprehensive and multidisciplinary approach, which inherently incorporates a range of cultural perspectives, we draw from their definition to examine differences (and similarities) in how respondents from various nations conceptualize and understand each component of the collaboration process. Specifically, we allowed themes to emerge from interview data in a bottom-up fashion, independent of this existing definition, but then leveraged their framework to interpret such themes and understand at which points in the collaboration process differences and similarities in conceptualizations were most likely to occur.

It is widely accepted that collaboration is a desirable process that allows parties to achieve more together than could ever be achieved alone (Huxham, 1996). The reality, however, is that collaboration is difficult to achieve. Differences in culture, manifesting in such things as language, goals and objectives, expectations of roles and responsibilities, and communication practices all can undermine an initiative, and may stem from distinct perceptions of precisely what collaboration is and what it entails. Thus, as one approach to better understanding collaboration across a broader range of contexts, we explore similarities and differences in how individuals conceptualize the collaborative process across U.S. and M.E. cultures.

2.2. Culture

While a long history of research exists to help inform how breakdowns in collaboration can be remedied, the value of such research is limited if culture is not explicitly taken into account. Illustrating this notion, [Feitosa et al. \(2018\)](#) recently reexamined longstanding models of team effectiveness and revealed that many key assumptions about team functioning were debunked when culture was considered. Beyond delineating cross-cultural differences, they identified specifically how existing team effectiveness frameworks required updating to incorporate culture, enabling precise recommendations for fostering multicultural team effectiveness. Similar work is needed to progress collaboration literature beyond just recognition of cross-cultural differences, and toward determining specifically where in collaboration models such differences emerge, as well as the underlying factors that potentially create them.

Culture has been conceptualized and investigated in a multitude of ways. In a review of the management literature, [Giorgi, Lockwood, and Glynn \(2015\)](#) identified five dominant approaches through which culture has been defined – as values, stories, frames, categories, and toolkits. When defined as *values*, culture reflects a group's preferences and desires that contribute to shared stability and meaning. Culture as *stories* entails written or verbal narratives that serve to construct identity and aid the transmission of ideas. Cultural *frames* shape which information is attended to and determine how a situation is defined. As *categories*, culture reflects social classifications that create a system for interpreting sameness and distinctiveness between objects, people and practices. Finally, culture as *toolkits* have been conceptualized as a 'grab bag' of stories, frames, categories, rituals, and practices that can be utilized in combination or as needed to derive meaning or take action. Considering that each of these definitions have strengths and weaknesses, and that there is considerable overlap across them, past scholars have called for an integrated approach to conceptualizing culture ([Giorgi et al., 2015](#)).

Based on current research and theory, there is reason to expect that culture can impact the way one conceptualizes and approaches collaboration, and that this influence may play out differently for collaborators from the U.S. versus the M.E.. For example, prior research shows these regions tend to differ on cultural values such as power distance, individualism-collectivism, and uncertainty avoidance. Power distance (PD) is "the extent to which less powerful members of organizations and institutions accept and expect power is distributed unequally" ([Hofstede, 1991](#), pg. 61). In high PD cultures, inequality between supervisors and subordinates is expected and understood, whereas low PD cultures view such relationships as more equal and less formal ([Taras, Kirkman, & Steel, 2010](#)). These values can determine how people of varying statuses disagree with and consult with one another in collaborative contexts. The U.S. is considered a low PD country (40), whereas the M.E. nations under examination generally score high in PD (ranging from 70 to 95).

Individualism-collectivism (I-C) describes people's preference to act as individuals or as members of a group across different contexts ([Hofstede, 1991](#)). In collaborative contexts, I-C can play a role in whether participants are primarily focused on working independently and achieving personal objectives, or on working together and achieving outcomes that are mutually beneficial to the group as a whole. The U.S. ranks highest on the I-C spectrum, with a score of 91; the M.E. nations are considered collectivist cultures with scores ranging from 25 to 40.

Uncertainty avoidance involves the degree to which people feel uncomfortable with, or seek to reduce ambiguity. Uncertainty avoidance can influence approaches to collaboration, as those high on this value have a strong inner urge to work hard, while their preference for clear rules and guidelines may render the complex, ambiguous situations that often call for collaboration particularly challenging. The U.S. scores below average at 46, while the M.E. countries generally score high on this value (range 65–85), with the exception of Lebanon, at 50.

As another example, recent research suggests the U.S. and M.E. may

also show differences in their cultural toolkits and categories. Samples from each region were found to use different strategies to engage in negotiation, which were tied back to unique social constructions related to the concepts of dignity and honor (i.e., the U.S. is considered a dignity culture, while the M.E. is considered an honor culture; [Aslani et al., 2016](#)). These cultural elements were associated with divergence in not only negotiation strategies, but also the aspirations associated with the negotiation, and the resulting outcomes, suggesting they may have implications for collaboration as well. In honor cultures, self-worth is socially inferred and can be lost or gained during social interaction ([Leung & Cohen, 2011](#)). Dignity cultures, in contrast, perceive inherent self-worth that's not dependent on others. One's conceptualization of collaboration as cooperative or competitive, therefore, may depend on whether self-worth and reputation are threatened, for example.

Furthermore, existing research also demonstrates that societies can be characterized by varying degrees of cultural looseness or tightness, where tighter cultures have stronger societal norms and enact more severe sanctioning when norms are deviated from ([Gelfand, Nishii, & Raver, 2006](#)). Western cultures are generally conceived of as looser ([Feitosa et al., 2018](#)), suggesting that culture may play a more prominent role in shaping collaboration for M.E. participants compared to those from the U.S. Taken together, current thinking and research about culture indicate individuals from the U.S. and M.E. may enter collaborative scenarios with unique conceptualizations of what collaboration entails based on cultural differences. In this study, we draw from a broad cultural framework ([Giorgi et al., 2015](#)) to aid the interpretation of, and theorizing about our data. We expect to observe similarities and differences in themes used to describe collaboration that align with similarities and differences in culture previously observed in the U.S. versus the M.E. Although cultural differences across M.E. countries have been observed ([Ralston et al., 2012](#)), we expected such differences would be minimal compared to those between the M.E. and the U.S. in light of the more pronounced divergence in cultural values and practices across these regions that has been well documented in prior research.

3. Methodology

Our approach involved two primary phases – one focused on data collection and initial thematic coding, and a second focused on linguistic coding and analysis of interview data.

Phase I. Structured interviews were conducted with approximately 19–24 people from each country (Egypt, Iraq, Jordan, Lebanon, and the United States), yielding 113 participants in total. Interviews were conducted in the native language of each country, and back-translated into English if necessary. Each interview lasted from one to one-and-a-half hours and was audio taped, transcribed, and translated by a native Arabic speaker. The interview protocol (see Appendix) probed interviewees about their definition of collaboration and various predictors of effective and ineffective collaborative processes and outcomes. Local collaborators were asked to use their networks to recruit samples as diverse as possible in terms of age, gender, socioeconomic status, and rural-urban living experiences, within the following cities: Cairo, Baghdad, Amman, Beirut, and Washington, DC (see [Table 1](#) for more information about sample demographics). Participants held a wide range of occupations (e.g., labor, engineer, sales rep., teacher, technician, accountant, bus driver, doctor, baker, journalist, student, professor), and received gifts (e.g., blankets, gift certificates) or payment (\$40) as compensation.¹

Our first step was to identify initial similarities and differences in collaboration descriptions across nations in the transcript data ([Braun & Clarke, 2006](#)). This thematic analysis allows the researcher to examine

¹ Recruitment procedures and samples overlapped with those used by [Gelfand et al. \(2015\)](#) to conduct separate interviews for developing their honor dictionary, as described in Appendix A of their article.

Table 1
Sample Demographics.

Country	Egypt n = 23	Iraq n = 19	Jordan n = 24	Lebanon n = 24	USA n = 23
Mean Age	41.61	45.6	39.43	40.63	36.10
Gender					
Female	50%	56%	50%	50%	50%
Male	50%	39%	50%	50%	50%
Marital Status					
Single	17%	6%	33%	25%	44%
Married	70%	83%	46%	71%	44%
Other/did not specify	13%	11%	21%	4%	11%
Education					
High school or below	30%	28%	50%	54%	17%
Some college/college degree	35%	28%	29%	25%	67%
Technical/trade/vocational training	4%	17%	0%	4%	0%
Professional degree/Master degree	9%	0%	0%	4%	17%
Doctorate degree	9%	11%	0%	13%	0%
Did not specify	13%	17%	21%	0%	0%
SES Level					
Low	4%	33%	17%	25%	6%
Low Middle	4%	0%	0%	17%	17%
Middle	38%	33%	54%	21%	28%
Upper Middle	38%	0%	4%	4%	22%
Upper	13%	22%	0%	29%	28%
Did not specify	4%	11%	25%	4%	0%
Religion					
Christian	13%	0%	0%	29%	78%
Muslim	70%	78%	54%	63%	17%
Other/did not specify	17%	22%	46%	8%	6%

themes and paint a thick description of the phenomenon being examined (Guest, MacQueen, & Namey, 2012). Because Phase II would involve text analysis, which focuses on extracting meaning from the words used to describe collaboration experiences, we opted to explore the context surrounding such words in Phase I. Specifically, transcripts (broken up by country) were analyzed by five external coders (undergraduate research assistants in the South Eastern U.S.) who carefully reviewed interviews and developed initial coding categories to capture underlying meaning and themes. This is similar to the axial coding process used in grounded theory, where open coding is used to relate initial categories to subcategories pertaining to the “axis of a category” (Strauss & Corbin, 1998). Categories were revised and refined through research team meetings, and transcripts were then reexamined using the updated coding scheme.

Through this process, various conceptual categories emerged that could describe both the context and nature of collaboration encounters. Descriptions could be categorized as pertaining broadly to why, how, and to what end the collaboration occurred, including the motivation or purpose, the process itself, facilitators and barriers, and the outcomes or rewards of engaging in collaboration. Within these groupings, we extracted emergent themes, enabling us to evaluate convergent and divergent patterns across nations. In contrast to deductive approaches, this inductive approach allowed for greater flexibility, as emergent themes did not always fit into an extant model or framework (Boyatzis, 1998). For example, if an indicator of success in an interview was a high grade, the underlying concept that could be extracted was achievement. Using a comparative case approach, this coding and analysis was used to generate initial understanding of how national differences related to variation in representations of collaboration, and allowed for an

additional layer of contextual richness in the ultimate interpretation of interview data. Similarities and differences in conceptualizations are presented in Table 2.²

Phase II. To deductively test for statistical differences in representations of collaboration across cultures, we utilized the Linguistic Inquiry and Word Count (LIWC; Pennebaker, Chung, Ireland, Gonzales, & Booth, 2007) software to analyze the type and frequency of words used in the interview data. LIWC is a computational text analysis tool which facilitates analysis of large blocks of text on a word-by-word basis. As part of its default *dictionary*, the program calculates percentages of words falling into different dimensions, capturing a range of constructs used in everyday speech that relate to such things as affective and cognitive processes, work, achievement, and religion.

LIWC has been utilized in numerous studies, largely coming out of the social sciences. The motivation for its use lies in the general belief that individuals’ writing and speech provide windows into their emotional and cognitive worlds (Pennebaker et al., 2007). In line with this perspective, LIWC has been used to analyze text from various sources and samples (e.g., technical articles, internet blogs, transcribed conversations; college students, psychiatric prisoners) to serve a range of purposes, such as providing insight about individuals’ physical and mental health (Stiles, 1992), capturing emotions (Handelman & Lester, 2007), and even linking language use to personality traits (Lee, Kim, Seo, & Chung, 2007). LIWC has thus consistently been used to abstract meaning and tap underlying constructs that are inherent in language. Further, prior research has used LIWC as a basis for making statistical comparisons across cultures (e.g., Freitag, Grimm, & Schmidt, 2011; Gelfand et al., 2015; Lopez, Quillivic, Evans, & Arriaga, 2019). For example, Gelfand et al. (2015) used LIWC to demonstrate that different models underlie negotiation processes in the U.S. versus in Egypt (i.e., rational model versus honor-based model).

Based on this foundation, we used LIWC to examine similarities and differences in conceptualizations of collaboration across the five samples. Because our interest is in cross-cultural comparisons, we refrained from approaching analyses from solely a western perspective, and instead, utilized the data to form the basis of our analyses. That is, rather than relying on LIWC’s default dictionary, we created new dictionaries based on transcripts, allowing us to better capture and interpret the content of interview data. We began by generating a master list of every unique word used across interviews. Creating a word list to capture constructs of interest is generally regarded as a critical first step in qualitative analysis (Gephart, 1993). Lists are typically derived from previous research, measurement scales, or dictionary and thesaurus references. Consistent with Gibson and Zellmer-Bruhn (2001), however, we used a data-based approach to develop our word list rather than creating it from a pre-existing westernized lens, since generating word lists based on U.S. sources could fail to capture or misinterpret culturally embedded language.

Once the initial word list was created, five coders (undergraduate research assistants, also in the South Eastern U.S., but independent of Phase I) independently categorized words into groups based on similar meanings or themes. For example, words such as *decide*, *consult*, *planning*, *consider*, *discuss*, *thinking*, *reflect*, *information*, *ideas*, and *data* were grouped in a category labeled “information processing.” Next, the first and second authors engaged in a series of verbal analyses and discussions where they merged and refined resulting categories. Words that were irrelevant or did not fit into categories (e.g., words specific to a workplace that did not describe collaboration), as well as articles, pronouns, and other colloquialisms (e.g., “um”) were removed. After several iterations, full agreement was reached regarding word categorizations.

A total of 30 initial categories resulted, which served as dictionaries

² Interview data from Jordan became available after the coding team was disbanded, thus is not included in Phase I analyses.

Table 2
Phase I Collaboration Themes Across Countries.

	Egypt <i>n</i> = 23	Iraq <i>n</i> = 19	Lebanon <i>n</i> = 24	USA <i>n</i> = 23
Motivation & Purpose to Engage in Collaboration	Obligation: God, Family, Friend Interest: Want-based	Obligation: Forced, Needed	Obligation: Family, Nation, Work, to help, Necessary	Interest: Want-based
Process	Interdependence Common fate Emphasis on status dynamics and structure Collective effort Distribution of work based on skills Members who support others tend to be more pro-active			Independence Individual contribution
Facilitators	Harmony Expertise Knowing role God Respect	Dedication Group agreement	Positive relationships Influence Security	Support Leadership Positive reinforcement
Barriers	Doubt of others Personal power Greed	Lack of knowledge Diversity	No vision Lack of leadership	Social loafing Clashing personalities
Outcomes & Rewards	Relational Something goes right. External Social: Protect and maintain honor	Relational Nothing goes wrong. External Social: Relationship quality Internal: Satisfaction from completion	Relational Nothing goes wrong. External Social: Protect and maintain honor	Task efficiency Something goes right. External: Award Internal: Satisfaction from completion

and were used to perform the LIWC text analyses. The program functions by cross-referencing dictionaries with text to look for matches, and then calculates frequencies indicating the percentage of words falling into each dictionary. Analyses were also run using select components of LIWC's default dictionary that were relevant to both the content domain and the custom dictionaries (i.e., *achieve*, *money*, and *religion*). Although these constructs were already represented, the default subdictionaries served as a method for verifying the efficacy of the custom dictionaries. Obtaining similar findings using both types of dictionaries would support the validity of the custom dictionaries, as the default dictionaries have undergone various validations in previous research. Further, this allowed us to examine the data from an additional angle—while the custom dictionaries were created using a ground up, culturally embedded approach, the default dictionaries enabled us to conduct select analyses from a top down, more generalized viewpoint.

Interview data from each country was analyzed separately to allow for cross-cultural comparisons, and mean percentages of words representing each category were calculated for every country (i.e., percentages for all interviewees in each country were averaged). Finally, independent sample t-tests were conducted to assess statistical differences in the types of words used across countries. To serve as a control, we conducted additional analyses on categories that exhibited significant results to determine if such findings were truly driven by national culture, or whether other variables were at play. Specifically, we repeated each of the LIWC analyses, dividing the data by demographics rather than by country. Interestingly, no significant differences emerged, suggesting that the differences in conceptualizations of collaboration we expand upon below are likely to be rooted in cultural differences. For the sake of parsimony and the goal of extracting themes, we report on only categories that yielded discernable patterns (i.e., clear

trends of differences or no differences between the U.S. and M.E. countries), and refrain from discussing those where differences emerged both within and across regions, with no clear tendencies (see Table 3 for dictionaries). As noted earlier, we did not combine M.E. samples to allow for the possibility of within M.E. differences (Ralston et al., 2012), but because analyses ultimately yielded greater differences between the

Table 3
Phase II Text Analysis Categories Demonstrating Clear Patterns.

Dictionary	Words Included in Dictionary
Challenge	competition, challenge
Distribution/resource allocation	allocate, equal, equality, distributed, divide, compensate, dispersed, mutual, equally
Effort	energy, pursue, effort, attempt, pursuing
External rewards	money, praise, praised, recognition, benefits
Information processing	decide, consult, planning, consider, discuss, seeking, thinking, reflect, information, ideas, data, agree, convince
Intrinsic rewards	learn, pride, fulfill, satisfied
Negative member traits	incompetent, unable, selfishness, disagreed, absent, useless, repulsive, irresponsible, thieves, unqualified, improper, dividing, negative, impose
Positive interpersonal outcomes	appreciation, understood, understand, compassion, loyalty, intimacy, friendship, comfortable, accepted, respect, trust, confidence, tolerance
Positive member traits	enthusiastic, impressive, willing, dedicated, constructive, trustworthy, positive, responsive, confident, secure, sincerity, sincere, honesty
Spirituality	sacredness, believe, presence, moral, devout, spirit, values, morals, righteousness, virtue, piety, God, mosque
Task-related member characteristics	experts, qualified, educated, specialist, knowledgeable, appointed, specialized

U.S. and M.E. than within, we discuss the M.E. samples as a homogenous group in the remainder of our paper, which is consistent with prior work suggesting M.E. nations are often quite similar to each other (Hennekam, Tahssain, & Syed, 2017; Suleiman, 2010).

4. Results and discussion

As described, Bedwell et al.'s (2012) review illuminated several features that commonly characterize conceptualizations of collaboration. Further, research on teamwork suggests that although conceptualizations of the construct may differ across cultures, most are likely to include information about the team's function, roles, nature of membership, and objectives (Cohen & Bailey, 1997). We therefore use the collaboration components identified by Bedwell et al. as a framework for interpreting the current data. Analyses revealed several differences in conceptualizations of collaboration across samples, as well as some similarities (see Table 4 for descriptives and *t*-test results). Below, we describe key findings and discuss how they fit into the overarching categories common to collaboration definitions, as well as potential theoretical explanations. Interpretations are based primarily on the linguistic analyses from Phase II, but are supplemented, as relevant, with more contextually-rich information available from the conceptual coding in Phase I.

Who Is Involved and the Nature of Their Relationship. Several significant differences between the U.S. and M.E. samples emerged in

regard to the percentage of words falling into the “spirituality,” and “positive interpersonal outcomes” categories, as well as the “negative member traits” category. The U.S. sample used significantly fewer words from each category in collaboration conceptualizations than did the M.E. samples. These findings suggest that individuals from M.E. cultures may place greater emphasis on *who is involved* and *how they relate to one another* when understanding and describing collaboration. This is perhaps fitting considering that research suggests collectivists are more engaged in collaboration when collaborators can be considered part of their personal in-group (Yamagishi, 2003). Personal characteristics and interactions therefore may play a more prominent role in collaborative settings for collectivists than for individualists, who may be more focused on the task itself.

One significant difference in terms of *who is involved* in collaboration relates to an emphasis on spirituality or a higher power, beyond the mention of individuals as participants. Specifically, the M.E. samples generally used significantly more words falling into the “spirituality” category than did the U.S. sample. Nearly identical results were found for the default dictionary “religion,” providing validity evidence for the “spirituality” category, and further corroborating these significant differences. These findings suggest that in M.E. cultures, God, or some form of a higher being, is highly embedded in conceptualizations of collaboration. The divine is seemingly perceived as a key player in the collaborative process, and is therefore included in descriptions of collaboration quite frequently. Examination of our context-based

Table 4

Phase II Results: Comparison of Mean Percent of Interview Words Falling into each LIWC Dictionary.

		Mean	SD	Egypt	Iraq	Jordan	Lebanon
Egypt	Positive Interpersonal Outcomes	0.86	0.91				
	Negative Member Traits	0.06	0.17				
	Spirituality	0.45	0.50				
	Religion (default dictionary)	0.52	0.65				
	External Rewards	0.17	0.27				
	Achieve (default dictionary)	4.14	2.02				
	Money (default dictionary)	0.96	1.06				
Iraq	Distribution/Resource Allocation	0.30	0.40				
	Positive Interpersonal Outcomes	1.13	1.09	−0.83			
	Negative Member Traits	0.11	0.16	−0.90			
	Spirituality	0.34	0.50	0.65			
	Religion (default dictionary)	0.26	0.40	1.45			
	External Rewards	0.12	0.17	0.73			
	Achieve (default dictionary)	7.09	3.15	−3.59*			
Jordan	Money (default dictionary)	0.76	0.61	0.70			
	Distribution/Resource Allocation	0.31	0.29	−0.07			
	Positive Interpersonal Outcomes	0.63	0.62	1.00	1.85		
	Negative Member Traits	0.24	0.43	−1.84	−1.25		
	Spirituality	0.40	0.54	0.33	−0.32		
	Religion (default dictionary)	0.51	0.77	0.05	−1.22		
	External Rewards	0.12	0.22	0.65	−0.09		
Lebanon	Achieve (default dictionary)	6.09	2.59	−2.84*	1.13		
	Money (default dictionary)	1.10	1.50	−0.36	−0.90		
	Distribution/Resource Allocation	0.08	0.16	2.55*	3.41*		
	Positive Interpersonal Outcomes	0.98	1.40	−0.32	0.38	−1.10	
	Negative Member Traits	0.20	0.33	−1.70	−1.01	0.44	
	Spirituality	0.55	0.73	−0.57	−1.05	−0.84	
	Religion (default dictionary)	0.46	0.69	0.27	−1.10	0.20	
USA	External Rewards	0.13	0.39	0.39	−0.15	−0.10	
	Achieve (default dictionary)	7.98	2.43	−5.81*	−1.04	−2.60*	
	Money (default dictionary)	0.72	0.95	0.80	0.15	1.04	
	Distribution/Resource Allocation	0.72	1.41	−1.32	−1.19	−2.20*	
	Positive Interpersonal Outcomes	0.38	0.33	2.41	3.12*	1.77	2.01*
	Negative Member Traits	0.01	0.03	1.43	2.91*	2.60*	2.71*
	Spirituality	0.16	0.23	2.53*	1.61	1.96*	2.50*
	Religion (default dictionary)	0.06	0.11	3.35*	2.41	2.78*	2.80*
	External Rewards	0.03	0.07	2.35*	2.18*	1.83	1.18
	Achieve (default dictionary)	3.17	1.38	1.88	5.36*	4.80*	8.30*
	Money (default dictionary)	0.40	0.44	2.33*	2.20*	2.15*	1.50
	Distribution/Resource Allocation	0.07	0.12	2.61*	3.60*	0.07	2.17*

Note: values represent *t* statistics for independent sample *t*-tests; *significant difference at $p < .05$.

conceptual coding in Phase I reveals that God was often cited as a figure that drives and facilitates the collaborative process, exerting a positive influence. In contrast, the U.S. sample's mention of God or spirituality was extremely low, if not non-existent.

Such contrasting findings are consistent with research in which individualistic and collectivistic values have been linked to differences in religiosity, the importance or centrality of religion in one's life (Verbit, 1970). Based on samples from three different countries, for example, Cukur, De Guzman, and Carlo (2004) concluded that collectivists tend to exhibit higher levels of religiosity than individualists do. Such differences have also been demonstrated in a business context – Rashid and Ibrahim (2008) showed that three different cultures had differing levels of religiosity, which consequently impacted their perspective of business ethics. Another study compared Protestants to other religions and found differences in psychological and interaction processes within collaborative work contexts (Sanchez-Burks, 2002). Our findings, coupled with these past studies, suggest that differing degrees of religiosity across cultures might manifest in the collaborative environment, and shape how collaboration itself is conceptualized.

The nature of observed differences in interpersonal aspects of collaboration is also evident in our sample (i.e., U.S. participants used fewer words falling into the “positive interpersonal outcomes” category), and existing research sheds light on our findings. Research suggests individualists and collectivists may possess different schemas regarding the behaviors and processes required to successfully engage in collaboration (Gelfand et al., 2007). For instance, Sanchez-Burks, Nisbett, and Ybarra (2000) showed that participants of Mexican descent (i.e., collectivists) identified socioemotional behaviors as important for success in groups, while Anglos (i.e., individualists), considered high levels of task-oriented behaviors, and low levels of socioemotional behaviors to be critical to group success. In another study (Yuki, Maddux, Brewer, & Takemura, 2005), researchers found that trust, an integral component of collaboration, is developed through different mechanisms in Japan (i.e., personal ties with group members), a generally collectivistic nation, versus the U.S. (i.e., shared membership in a formal category), an individualistic nation. Other work shows cooperation is facilitated by socioemotional, or relational factors in collectivistic cultures, but by instrumental, or task-based factors in individualistic cultures (Chen, Chen, & Meindl, 1998). Taken together, research suggests collectivists and individualists have different conceptualizations of what constitutes successful collaboration in regard to the relevance of interpersonal, or task-based outcomes.

Interestingly, the M.E. samples used significantly more words categorized as “negative member traits,” suggesting that their focus on the interpersonal aspects of collaboration is not limited to those that are positive. This might relate to the cultural logic of honor, or the extent to which one is concerned with protecting their reputation and self-worth during social interaction (Leung & Cohen, 2011). In “honor cultures,” negative characteristics of team members might be particularly salient because they may be indicative of instances in which others are at risk of losing honor. In contrast, in cultures where honor cannot be lost or gained, such as Western dignity cultures, losing self-worth may not be perceived as relevant to their conceptualizations of collaboration. A recent study on cross-cultural negotiation described the U.S. as a “dignity culture,” and a M.E. sample as an “honor culture,” (Aslani et al., 2016), further supporting the notion that an emphasis on reputation could render negative assessments of collaborating parties particularly salient for M.E. cultures.

While negative aspects of collaborators' reputations emerged as a major contributor to cross-cultural differences, no significant differences were found between M.E. and U.S. samples in the category “positive member traits,” suggesting positive impressions of others are equally salient and relevant to collaboration in both cultures. Phase I analyses show positive and negative descriptions of member traits were often presented as facilitators and barriers to collaboration, respectively. Additionally, earning praise or honor were frequently mentioned by M.

E. samples as outcomes of collaboration, providing further evidence that honor is a central concern guiding interpersonal aspects of collaboration in these cultures (Rodriguez Mosquera, Fischer, Manstead, & Zaalberg, 2008; Aslani et al., 2016). Overall, findings indicate both M.E. and U.S. cultures describe *who is involved* when conceptualizing collaboration, but do so with varying degrees of emphasis, and focus on different aspects of this domain.

Understanding of Joint Task or Activity. Interestingly, no significant differences emerged in categories related to an *understanding of the task* itself. U.S. and M.E. samples used relatively equal numbers of words belonging to the category “task-related member characteristics,” suggesting similar conceptualizations of the importance of team members' knowledge and expertise in collaborative contexts. Further, all samples described collaboration using similar percentages of words in the “challenge” and “effort” categories, indicating comparable emphases across cultures on the difficulty, and effort required to jointly accomplish collaborative task objectives. Results largely align with Phase I, where few differences emerged across nations in conceptual themes used to describe the collaboration itself. Findings suggest issues that arise in cross-cultural collaboration do not seem to stem from differences in conceptualizations of the collaborative task. Instead, and in line with the bulk of our findings, such differences seem to lie in dimensions of collaboration that relate to people and values.

Objective and Motivation. Most definitions of collaboration allude to the *objectives* involved, and the motivation for engaging in collaboration (Bedwell et al., 2012). In phase II, one category emerged which seemed to capture this dimension, namely “external rewards.” Our analyses revealed that the M.E. samples generally used significantly more words falling into the “external rewards” category when conceptualizing collaboration than did the U.S. sample. Additionally, LIWC's “achieve” and “money” default dictionaries yielded similar results, providing convergent evidence that M.E. cultures might place a greater emphasis on the external rewards associated with collaboration than do their American counterparts.

Drawing from previous research, findings indicate cultural differences in the perceived value of outcomes associated with collaboration. Individuals from collectivistic cultures, for example, are more likely to view groups as a means of agency than are those from individualistic cultures (Kashima et al., 2005). This likely stems from the tendency for individualists to gauge success based on individual recognition and achievement, both of which can be hindered in the context of collaboration. Indeed, values of individualism are associated with a general resistance to teams due to a preference for individual achievement and a focus on the self (Kirkman & Shapiro, 1997). As an example, Chen, Brockner, and Katz (1998) found that Americans had particularly negative attitudes toward teams when they performed well but their team performed poorly. In contrast, Chinese participants showed more positive attitudes toward teams in identical situations. This pattern of results suggests that individualists might view collaboration as a hindrance to individual achievement, whereas collectivists do not seem to share such sentiments.

Results also point to power distance (PD) as a potential underlying explanation. Phase I revealed themes of obligation and force as reasons for engaging in collaboration in M.E. samples, and associated outcomes reflected relational benefits, as well as praise and recognition, aligning with the “external rewards” category in Phase II. Conversely, the U.S. sample engaged in collaboration based on personal interests, while intrinsic rewards and task efficiency emerged as primary outcomes. Status and power dynamics may be at play – M.E. cultures, who are higher on PD (Kirkman, Chen, Farh, Chen, & Lowe, 2009), may have felt obligated to their superiors to engage in collaboration successfully, causing external rewards from these superiors to become more central to their conceptualizations of what collaboration entails. As a lower PD culture, U.S. collaborators may be less motivated by superiors' directives, and more focused on the personal rewards that collaboration can foster. Interestingly, no significant differences emerged across

samples for the “intrinsic rewards” category, suggesting that both cultures can be driven by intrinsic rewards from collaboration, but that differing emphases on external rewards is what sets them apart.

Collaborative Process. The U.S. sample used significantly fewer words falling into the “distribution/resource allocation” category than did the M.E. samples. This category captures differences in how *collaborative processes* are carried out, specifically, the distribution of resources among collaborators. Findings suggests that U.S. and M.E. cultures may have different conceptualizations about the processes through which collaboration should be executed. This is consistent with previous research differentiating the importance of equity versus equality across cultures. Specifically, equity is a condition in which outcomes are distributed based on individuals’ relative contributions (Gelfand et al., 2007), while equality entails an equal distribution of outcomes, regardless of individuals’ relative contributions. Meta-analytic findings suggest that equity is more strongly valued in individualistic cultures, while equality is preferred in collectivistic cultures (Sama & Papamarcos, 2000). Whereas members of collectivistic cultures might approach collaboration with the view that resources should be equally distributed to everyone involved, individualistic cultures might reserve such an approach for situations where contributions are equal, potentially explaining why the U.S. sample used “distribution/resource allocation” words significantly less than M.E. samples.

Another potential explanation for this discrepancy relates to the cultural dimension uncertainty avoidance. M.E. cultures, considered higher on this value, may find it particularly important to add structure and certainty to the collaborative process by delineating precisely how resources are allocated in the collaboration, whereas the U.S., a low uncertainty avoidance culture, may allow this component to emerge naturally, or place less emphasis on exact structural components of the collaborative process. Furthermore, cultures of honor tend to originate in “lawless” environments where a weak, or non-existent state is unable to enforce contracts or protect people from predation. In such environments, individuals may be more sensitive to inequities in order to avoid being cheated or having wrong doings done to them (Miller, 1993).

Interestingly, there were no differences for words that fell into the “information processing” category, another component of the *collaborative process*. Regardless of culture, there appears to be a recognition that tasks complex enough to necessitate collaboration require a significant degree of information processing in order to accomplish them. These findings suggest there is agreement across cultures regarding how to approach the task itself, but less agreement when processes are more interpersonal in nature (i.e., distribution of resources).

As modern-day issues become increasingly complex, the need for collaboration between culturally-diverse participants cannot be overstated. It is therefore critical to gain an understanding of how breakdowns in such collaborations can occur, and in turn, how they can be remedied. This study suggests collaboration struggles can stem in part from different ideas about what collaboration is and what it entails. Findings show people in the M.E. and the U.S. may hold different conceptualizations of collaboration – as demonstrated by how participants described core components of collaboration – and suggest national culture may explain unique definitions. Leveraging previous research showing differences in cultural values across countries in our sample, we suggest these distinctions help explain diverse conceptualizations and orientations to engaging in collaboration. Below we expand on the implications of our findings for both research and practice, as well as limitations (summarized in Table 5).

4.1. Implications

This study expands theoretical understanding of cross-cultural collaboration by considering the notion that issues can originate from differences before the collaborative process even begins, stemming from unique perspectives about what collaboration actually is. While prior research has uncovered much about how people may behave differently

Table 5

Summary of Key Findings and Takeaways.

Facet of Collaboration	What's Different?	What's Similar?	Takeaways for Understanding and Fostering Cross-Cultural Collaboration
<i>Who is involved and the nature of their relationship</i>	<ul style="list-style-type: none"> • Spirituality • Religion • Positive interpersonal outcomes • Negative member traits 	<ul style="list-style-type: none"> • Positive member traits 	<ul style="list-style-type: none"> • Cultures vary in their emphasis on interpersonal outcomes of collaboration and the extent to which negative interpersonal experiences are considered central to collaboration • Interventions should be designed to focus on not just the task itself, but to foster interpersonal relationships, address conflicts that arise, and emphasize positive characteristics of collaborating parties • Some cultures identify a spiritual being as a key player in the collaborative process • Interventions should focus on allowing cultures who consider spirituality relevant to collaboration to express their values, and on ensuring that all collaborators are respectful of each other's values and expressions
<i>Understanding of joint task or activity</i>	<ul style="list-style-type: none"> • No significant differences 	<ul style="list-style-type: none"> • Task-related member characteristics • Challenge • Effort 	<ul style="list-style-type: none"> • Components of collaboration conceptualizations focused on the joint task itself may be more likely to be aligned across cultures • Interventions can focus on acknowledging the challenge of collaborating and highlighting characteristics of team members that relate to the task, but are less critical than other interventions focused on interpersonal and motivational elements
<i>Objective and motivation</i>	<ul style="list-style-type: none"> • External rewards • Achieve • Money 	<ul style="list-style-type: none"> • Intrinsic rewards 	<ul style="list-style-type: none"> • Cultures vary in their focus on external motivators for engaging in collaboration, but may be more likely to be aligned when it

(continued on next page)

Table 5 (continued)

Facet of Collaboration	What's Different?	What's Similar?	Takeaways for Understanding and Fostering Cross-Cultural Collaboration
Collaborative process	<ul style="list-style-type: none"> Distribution/resource allocation 	<ul style="list-style-type: none"> Information processing 	<p>comes to internal motivators</p> <ul style="list-style-type: none"> Interventions should be designed to ensure both extrinsic and intrinsic objectives can be realized, and to enable both individual- and team-level rewards Cultures vary in the extent to which they consider resource allocation a central component of collaboration, but may be more aligned in their recognition of the importance of information processing in collaborative contexts Interventions should be designed to allow for both equality and equity in the structuring of tasks and outcomes, and to facilitate effective information processing

based on their cultural backgrounds (Gelfand et al., 2007), this study provides a cognitive explanation for such differences, specifically in collaborative approaches across countries. Findings indicate that conceptualizations of collaboration across cultures may shape the way people approach and engage in collaboration, including unique cultural norms and expectations. We build on the work of Gibson and Zellmer-Bruhn (2001), who found cross-cultural differences in metaphors of teamwork, to show that such differences can manifest in broader collaboration contexts and in unique ways, using a sample that is often underrepresented in cross-cultural research. Though we did not examine outcomes of collaboration, when collaborating parties have diverging perspectives of what collaboration entails, there will likely be implications for performance. Just as shared cognition is critical for team performance (DeChurch & Mesmer-Magnus, 2010), future research should further explore how cross-cultural differences in cognition about collaboration can contribute to variation in processes and outcomes.

More specifically, this work advances science and practice by demonstrating that to truly understand collaboration, existing frameworks require customization, and do not apply verbatim when different cultures are involved. Beyond identifying differences, we move toward understanding precisely which aspects of individuals' approaches may contribute to breakdowns. While conceptualizations from both regions generated themes corresponding to features of collaboration identified by past research (Bedwell et al., 2012), different cultures showed unique priorities and emphases within each feature, as well as some areas where cultures were aligned.

For example, within the *who is involved and the nature of the relationship* aspect of the framework, our findings indicate that M.E. cultures place greater emphasis on interpersonal aspects as compared to the U.S., who may perceive this component as less relevant to the collaborative objective. The M.E. samples appeared to strongly value positive

interpersonal outcomes that can be gained between them and their collaborators, while at the same time, any negative impressions of others that formed created lasting consequences. From a practical perspective, this suggests that the U.S. and similar cultures may focus too little attention on interpersonal aspects when engaging in collaboration with M.E. and similar cultures, which can contribute to collaboration struggles. Thus, interventions should be developed that focus on fostering interpersonal relationships, and taking the time to address interpersonal issues when they do arise, rather than devoting resources solely to the task at hand. The U.S. and the M.E. samples placed equal emphasis on positive member traits, suggesting that also highlighting these through such interventions would be particularly beneficial.

Findings also uncovered a spiritual, higher being as a key contributor to the collaborative process in M.E. samples, further supporting the idea that for these cultures, collaboration transcends the task itself. Considering that religion represents an emotionally-charged aspect of human interaction which can either bolster conflict or serve as a tool for peacebuilding (Sampson, 2007), this greatly expands current theory, which largely hasn't considered a spiritual element in collaboration frameworks, and also conveys that incorporating this into practical interventions could go a long way in fostering cross-cultural collaboration. Such interventions could focus on enabling those who value spirituality to express that value when collaborating, and simultaneously equipping all parties with the knowledge and skills to show consideration and respect when differences in this value are present.

The *understanding of joint task or activity* component of collaboration conceptualizations yielded encouraging findings in the sense that no significant differences emerged. The U.S. and M.E. samples referenced the challenge and effort that collaboration requires, as well as characteristics of collaborators that contribute to task accomplishment to equal degrees. This indicates that taking the time to clearly delineate each collaborators' competencies as they relate to the task, and to openly acknowledge and work to remedy challenges associated with collaborating may be an effective approach to both ensuring the group is mutually aware of their personnel resources, and highlighting areas where everyone is in alignment. At the same time, seemingly fewer resources can be devoted to this in the context of interventions, so that greater attention can be focused on managing areas where collaboration conceptualizations differ.

As evidenced by themes in the *objective and motivation* aspects of collaboration, individuals from different cultures may approach collaboration with different outcomes in mind. While the M.E. samples referenced achievement and external rewards as primary motivators more than the U.S. sample, all participants placed comparable emphases on the intrinsic benefits that can accompany collaborative efforts. As a means of managing cross-cultural differences, this indicates that collaborations should be structured in a manner that allows for both types of outcomes to be realized. For example, reward systems could be put in place where supervision and feedback are regularly implemented as a means of generating recognition and rewards. Because U.S. participants may have referenced external rewards less because they don't perceive collaborative settings as opportunities for individual achievement (Kirkman & Shapiro, 1997), these reward systems could also enable external rewards to be generated at the individual- as opposed to just the group-level. Interventions could also focus on ensuring that participants have opportunities to contribute to the collaboration in ways that are intrinsically meaningful to them.

Finally, the *collaborative process* element of collaboration frameworks elucidates a stronger emphasis on resource allocation in M.E. samples, as compared to the U.S. Because this may stem from cultural differences in the value placed on equality versus equity (Sama & Papamarcos, 2000), one implication is that collaboration should be structured in a manner that allows for both approaches. Given that collaboration is often initiated to tackle large, complex problems, it will likely entail multiple subgoals and subtasks that can correspond with different systems of allocating resources and rewards. Whereas some aspects can be

associated with an equal distribution of resources and outcomes, for others it may be appropriate to base allocations on relative contributions. This category also revealed equal references to information processing across countries, suggesting interventions should be designed to facilitate this aspect of collaboration as much as possible (e.g., project management software, meeting facilitators, etc.).

Taken together, findings reveal a trend in that most differences centered around social and motivational elements of the collaborative process, while none emerged in discussions of the collaborative activity itself, which is consistent with past research showing cultural diversity in teams often generates socio-emotional issues, such as conflict and reduced social integration (Stahl et al., 2010). This knowledge of both differences and similarities in conceptualizations helps expand theory, provides a basis for future empirical investigation, and can inform the development of interventions designed to facilitate cross-cultural collaboration. Beyond the possible interventions described above, it may be helpful for individuals to make diverse representations of collaboration visible to one another as a means of facilitating perspective-taking and enabling participants to gain more accurate perceptions of others' behaviors (Bernstein & Davis, 1982). For instance, a kickoff discussion at the beginning of the collaborative effort about how involved parties perceive collaboration and what they expect from it may help collaborators interpret each other's behaviors appropriately and reduce miscommunications. As a next step, collaborating parties can work toward establishing a common understanding of what the collaboration will entail as a means of managing differences.

This research has important implications for collaboration that occurs across national boundaries. Our insights about the differences in the ways individuals from the U.S. and various regions throughout the M.E. view collaboration could shed light on potential barriers and enablers of more effective cross-cultural collaboration. Given the critical importance of understanding how to improve the functioning of cross-cultural collaborations (e.g., Salazar & Salas, 2013), we encourage scholars to draw upon our findings as a starting point for exploring collaboration within and across the Middle Eastern region of the world.

4.2. Limitations and future directions

It is important to also consider the limitations of our work. We focused on national differences, but did so from our North American lens. Unfortunately, we did not have representation from any of the M.E. countries in our sample in our research team, including our qualitative coders, which may have limited our interpretation of the data. Because there could be differences in the interpretation of words across countries, and only the U.S. perspective was incorporated into the coding process, it is possible that different coding categories/dictionaries could have emerged or that words could have been categorized differently if the coding team also included members from the M.E. That said, we coded based on word lists rather than words in the context of full interview responses, which reduced the extent to which differences in the structure of language across countries could influence coding. Further, by using transcripts from each country to generate dictionaries rather than default LIWC dictionaries, and by using both content and quantitative analysis, we sought to identify conceptualizations of collaboration relevant to each country to the best of our ability.

Additionally, findings apply specifically to the samples in this study, which are notably small, and it is not clear the degree to which their implications can be generalized to broader settings. However, given that many of the differences can potentially be attributed to previously established differences in cultural values, it's possible that similar patterns could emerge in other samples characterized by cultural values similar to those in our sample. This is an avenue for future investigation. While one approach to conducting research of this type is to focus on creating homogeneity in samples' demographic characteristics to aid comparability (e.g., Gibson & Zellmer-Bruhn, 2001), others have criticized this approach for being less representative of the population, and

therefore, less generalizable (Reynolds, Simintiras, & Diamantopoulos, 2003). We adopted a different approach which focuses on deliberately obtaining samples as heterogeneous as possible as a means of enhancing external validity (Reynolds et al., 2003; Schwartz & Sagir, 1995). Further, this approach also promotes internal validity by minimizing systematic variance in demographic characteristics across samples, making it less likely that such characteristics could be alternative explanations for any observed differences. Interestingly, recent research has found when groups of people representing different categories of common demographics, including gender, age, education, income, nation of residence, and religious denomination, they tend to be much more similar on social variables (e.g. moral attitudes, values, trust) than one might expect (on average, similarity was greater than 90%; Hanel, Maio, & Manstead, 2019), suggesting our samples are likely to be fairly comparable in this regard. Considering the heterogeneity in our samples in terms of their demographics and the type of work they did, as well as the fact that we found no significant differences in the LIWC analyses when we compared the data based on demographics rather than countries, our approach helped support both internal and external validity. Nonetheless, future research explicitly exploring certain factors, such as type of work, and cross-cultural experience, as potential moderators would be beneficial.

Our findings rely on the assumption that communication carries or is comprised of cultural meaning. Analyzing communication transcripts provides a snapshot of how people from different cultures collaborate, but interviews did not provide a particular task context for interpretation. Each respondent could have been discussing collaboration around a different task type, potentially affecting the nature of their collaboration representations. Although a generic understanding of collaboration was attained, greater background regarding the type of collaborative task and goal being discussed may have helped to account for additional variation. Prior research has long-established how collaboration-related team processes and outcomes are contingent upon factors such as interdependence, team size, and rewards (Mathieu, Maynard, Rapp, & Gilson, 2008). In this study, the inability to systematically account for these types of defining characteristics across collaborations mentioned by respondents limits our ability to theorize about the influence of these contingency factors.

Related, the interview protocol was designed to capture foundational conceptualizations of collaboration rather than cross-cultural collaboration specifically. While we argue our findings can inform our understanding of cross-cultural collaboration because it provides insight about how people from different cultures approach collaborative settings, we did not directly examine cross-cultural collaboration. Some participants may have been drawing from experiences with collaboration with culturally diverse collaborators, whereas others may have drawn from more homogenous experiences. Related, because the U.S. is generally more multicultural than the M.E., it is possible that the U.S. sample had more experience collaborating with culturally diverse others, thus may have been more likely to draw from collaboration experiences that were cross-cultural when formulating responses, which could have contributed to observed differences. We helped mitigate concerns about this and the range of tasks participants may have drawn from by collecting samples that were as diverse as possible, and were from large cities within each country, allowing for a range of tasks and cross-cultural experiences to be represented in the data. Nonetheless, we encourage future research that adequately considers and compares the effects of these important collaboration characteristics and experiences, and that applies our findings to the examination of cross-cultural collaboration specifically.

Finally, while we kept M.E. samples separate in our analyses, we ultimately chose to focus on differences and similarities in responses across the M.E. countries and the U.S. in our discussion, and did not explore differences within the M.E. samples. A few differences did emerge, however, and we note that we do not suggest that cultural perspectives are identical across countries in that region. Nonetheless,

we opted to focus on U.S.-M.E. comparisons due to more marked differences in cultural factors across these populations that have been documented in prior research, as well as the greater consistency in patterns of findings that emerged when we made such comparisons. Likewise, we acknowledge culture is also not necessarily uniform across the U.S. (e.g., Americans from the south are more likely to exhibit on honor culture compared to those in the north; Cohen, Nisbett, Bowdle, & Schwarz, 1996), thus differences between U.S. and M.E. collaborators may be more or less pronounced depending on the region of the U.S. participants.

5. Conclusions

Cross-cultural collaboration needs are not going away, and will only increase in complexity. Pervasive throughout many modern day issues and business objectives are calls for multiple parties to work together, and arguments that solutions are dependent on international collaboration (e.g., Corell, Liverman, Dow, Ebi, Kunkel, & Mearns, 2014). Everyday issues ranging from smaller-scale (e.g., job performance) to those at broader, societal levels (e.g., integrative medical and psychological treatment) also require collaboration in globally-connected, increasingly diverse contexts. The need to more deeply investigate cross-cultural collaboration is thus ever more critical. By identifying nuances in how different cultures approach collaboration, and elucidating specific areas where current frameworks cannot be uniformly applied, we have provided both a springboard for future research, and a foundation for the development of practical interventions. We found several differences between the U.S. and M.E, yet the similarities identified between nations remind us that competing mentalities need not dominate, and can serve as building blocks for uniting collaborating parties. Specifically, Middle Eastern participants emphasized (1) who is involved in the collaboration (e.g., a strong reliance on spirituality), (2) the interpersonal aspect of the collaboration process, (3) higher levels of motivation (e.g., considering external rewards), and (4) equality through proper distribution and allocation of resources, more so than the American participants. However, these cultures all agreed that collaboration is challenging and requires effort to be successful. In sum, findings suggest the importance of having not only a generic understanding of collaboration, but a context and culture-specific understanding of it as well. Bringing these varied conceptualizations to light and working to resolve them may be the key to avoiding conflict and misunderstanding, and facilitating collaboration across cultures. Within a collaborative context, understanding how parties that are required to collaborate conceptualize collaboration is a crucial piece of the puzzle of successful collaboration.

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Appendix

Interview protocol

1. We are interested to know whether you work largely by yourself in your job or if you work with others?
2. Can you tell us about some times when you or someone you know has worked well with others on a project? Why did you work together on the project?

3. Can you tell us about some times when you or someone you know has worked with others on a project that did not go well? Why did you work together?
4. Why do you think it did not go well – what did the other people bring to the situation in terms of personality, values, skills, etc. or other things that made it not go well?
5. When working with others on a project at your job: Do you need to trust the people you with? Why?
6. When working with others on a project at your job: Does there need to be one leader? Why?
7. When working with others on a project at your job: Does everyone need to contribute equally? Why?
8. When working with others on a project at your job: Do all group members support one another? Why? How? What kinds of support do members provide each other?
9. Given everything we have just talked about, what do you think of when you hear the word “collaboration?”

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