



## In whom do we trust? Critical success factors impacting intercultural communication in multicultural project teams

### Wenyuan Yu

National University of Ireland, Galway  
Enterprise Research Centre, School of Engineering,  
National University of Ireland, Galway, H91 HX31,  
Ireland  
[ywjennifer@gmail.com](mailto:ywjennifer@gmail.com)

### Kathryn Cormican

Lero - the Irish Software Research Centre, National  
University of Ireland, Galway  
Enterprise Research Centre, School of Engineering,  
National University of Ireland, Galway, H91 HX31,  
Ireland  
[kathryn.cormican@nuigalway.ie](mailto:kathryn.cormican@nuigalway.ie)

### Qiong Wu

(corresponding author)  
School of Business, Macau University of Science and  
Technology  
Avenida Wai Long, Taipa, Macau, China  
[qiwu@must.edu.mo](mailto:qiwu@must.edu.mo)

### Suzana Sampaio

Federal Rural University of Pernambuco  
Department of Computer Science, Rua Dom Manuel de  
Medeiros, s/n - Dois Irmãos, Recife, Brazil  
[suzana.sampaio@ufrpe.br](mailto:suzana.sampaio@ufrpe.br)

### Abstract:

Trust is a significant enabler for intercultural communication in project teams. Researchers and practitioners, therefore, need to know which factors might enhance trust in intercultural communication. Contributing to the yet limited number of studies in the field of intercultural communication for multicultural project teams, this research theoretically analyzes and empirically investigates the enablers of trust for intercultural communication focusing on emotional intelligence, empathy, interaction, and transparency. Using a field sample of 117 experienced project managers working in multicultural project teams, we find that interaction and transparency significantly and positively influence trust in intercultural communication; empathy marginally and positively influences trust. Emotional intelligence does not exert an effect on it. These results provide novel theoretical and empirical insights which have practical implications for project managers. The findings direct suggestions for additional theoretical work.

### Keywords:

trust; intercultural communication; project teams; emotional intelligence; empathy; transparency.

DOI: 10.12821/ijispm090302

Manuscript received: 14 February 2021

Manuscript accepted: 2 July 2021

## 1. Introduction

In recent years, the ubiquity of multicultural teams has drawn attention to intercultural communication (ICC) and the benefits and challenges it brings. Project success is tightly linked to successful communication between stakeholders [1], [2]. However, international projects can suffer from ambiguous communication [3] and poor cross-cultural communication [4]. Ochieng and Price [5] maintain that achieving project success is made considerably more complex within multicultural project teams characterized by dissimilar organizational and regional cultures. Research shows that companies with highly functioning multicultural teams are better placed to succeed in international projects [6], [7] and that international companies are currently making great efforts to realize the benefits of effective intercultural connection and cultural diversity on project performance [8]. Hence when implementing project plans, the roles of culture and intercultural communication (ICC) competency in multicultural teams are becoming increasingly evident. A better understanding of ICC in multicultural teams will allow project managers to develop feasible solutions to intercultural communication conflicts; improve their ability to deal with complicated group issues aggregated by diversified cultures [9] and maintain competitive advantage within globalized settings [3]. However, although the significance of ICC has been highlighted by researchers and practitioners, research on managing the communication challenges confronting multicultural project teams over individuals [10] has been largely neglected. Moreover, our understanding of ICC remains deficient in the following ways.

First, Barker [11] argues that scholars often see cultural differences as sources of misunderstanding and conflicts, which negatively affect communication. He suggests that too much emphasis is placed on the management rather than the appreciation of cultural differences. He argues that an awareness of the difference does not mean transforming everyone into the same style. Instead, Barker [11] explains that project managers should motivate the team to be curious about and respect different cultures. Consequently, the challenge in building effective communication with staff from different cultures persists [8], [12]. Researchers are thus calling for more investigations into the influential attributes of ICC [8], [13]. Moreover, Martin [14] states that, there is no satisfactory, comprehensive conceptualization of intercultural communication. Therefore, academic inquiries that seek to gain a more fine-grained understanding of the concepts and enablers of intercultural communication are necessary.

Second, a thorough review of the extant literature on the antecedents of ICC indicates the importance of constructs such as commitment [15], [16], the ability to cooperate [17] and interpersonal skills [18]. It also reveals that *trust* is a significant enabler for ICC [5], [16], [18], [19] and that a lack of trust contributes significantly to communication breakdown and can lead to management failure of multicultural teams which in turn obstructs project success. Although trust is viewed as a core element in building confidence and emotional bonds [20] and it leads to increased knowledge sharing and reduced task uncertainty [21], it is difficult to develop trust in the multicultural environment because it is an elusive, dynamic and complex concept [22]. While much of the literature points to the importance of trust, the role trust plays in ICC remains ambiguous. There lacks a clear framework and effective measurements for trust in ICC.

Third, previous researchers have explored the enablers of trust in project teams. For instance, Rezvani [17] investigated how emotional intelligence influences trust in hydropower project teams; Akgun et al. [23] found that empathy and trust are positively associated with each other in software development project teams; Wong et al. [24] examined multi-type project teams and proposed that interaction is important for trust-building in project teams. Mesly [25] focused on construction project teams and asserted that transparency influences the development of trust in teams. However, research on *multicultural* project teams is still limited and underdeveloped. One notable exception is a qualitative study conducted by Ochieng and Price [5]. They focused on multicultural construction project teams in Kenya and the UK and examined the critical success factors (CSFs) for trust. Since everyday work has become increasingly international and project centric, these aforementioned lines of research must be extended and supported with more empirical studies within multicultural teams. This will extend the validity of trust in ICC into multicultural project teams and provide practical learnings for project managers who seek to implement best practice in international organizations toward effective intercultural communication.

In addressing these research gaps, this study attempts to address these deficits by focusing on the critical success factors for trust in ICC from the perspective of multicultural project teams comprising individuals from different cultural backgrounds working in international companies. This paper thus underpins, qualifies and amends existing evidence by shedding a quantitative light on the questions:

1. What are the critical success factors for trust in ICC in multicultural project teams?
2. Whether and how do emotional intelligence, empathy, interaction, and transparency impact trust in ICC in multicultural project teams?

We address these research questions by applying communication theories and project management concepts to better understand ICC issues incurred by multicultural project teams. More specifically, we conduct a comprehensive literature review to identify, define, categorize, and aggregate the factors that can facilitate the achievement of trust in the field of project management. Four enablers of trust emerge, namely emotional intelligence, empathy, interaction, and transparency. These concepts serve as the foundation that underpins our hypotheses, research method and findings. We analyze real-world data from 117 experienced project managers working in a multicultural environment using SPSS and Partial Least Squares (PLS). Finally, we draw conclusions and discuss the implications of the study for future research.

This research makes significant empirical, theoretical, and practical contributions. Theoretically it provides an advanced understanding of the concepts of trust and its critical success factors in the context of project management. Further it presents a theoretical framework, an empirical analysis and it also provides effective measures for the enablers of trust in ICC. Most importantly, the results of this study are expected to add to existing research by highlighting the critical role of trust in integrating teams in assisting practitioners to achieve high levels of team communication when communicating in an intercultural project context.

The remainder of this paper is structured as follows. The next section presents a brief review of the extant literature on ICC in multicultural teams, the benefits, and challenges of trust in ICC and the success factors for trust in ICC, whereas section three presents our research model and proposed hypotheses. It is followed by a description of the research methodology and data collection procedure. We then present the results of the data analysis and related discussions. Finally, we draw conclusions and discuss the implications of the study for future research.

## 2. Literature review

### 2.1 Intercultural communication skills in multicultural project teams

Scholars in the field of project management have researched team effectiveness, team communication and trust for decades. More recent changes in practice have led to a focus on multicultural teams and thus intercultural communication (ICC). Researchers have identified benefits associated with multicultural teams in projects. For example, multicultural teams are lauded to bring fresh ideas to the workplace and to projects [5]; they are associated with high levels of team performance [4]; better relationships are developed between team members [9] and multicultural teams have been shown to help maintain competitive advantage [3]. However, human communication is shaped by culture and because cultural communication patterns are acquired and internalized at a very early age, people are generally unaware of them.

ICC incorporates cognitive, affective, and behavioral attributes, which Chen [26] conceptualizes as intercultural awareness, sensitivity, and adroitness, respectively. To better understand the concept of intercultural communication in project management, Gudykunst [27] defines it as the interactions among human beings from diversified cultural backgrounds with various patterns, styles, and preferences in communication. This perspective has been adopted by many researchers in this specific area for the past ten years [28].

Scholars emphasize an awareness of culture in ICC and suggest that providing a sense of belonging and security within teams is the key to the successful management of ICC. Further investigations into how to provide a sense of security and successfully manage ICC led to a preliminary list of constructs considered essential to effective ICC, including

commitment [15], [16], ability to cooperate [17] and interpersonal skills [18]. Further, *trust* is shown to be a major antecedent of ICC dominant to all other concepts [5], [9], [18]. Research indicates that cultural difference does not pertain to one specific individual difference [15] and the challenge is how to build effective communication in the most appropriate way with individuals from different cultures [8], [15]. In this context, cultural understanding in ICC is more difficult because of the emergence of barriers such as a lack of trust. It triggers misunderstandings, personal bias, and unwillingness to cooperate with others [6].

## 2.2 The benefits and challenges of trust on intercultural communication

Trust is defined as “a psychological state, which refers to the intention to accept vulnerabilities on the basis of taking a positive attitude towards intentions or behaviors of another” [29]. This definition, which emphasizes the willingness to accept the vulnerability of the relationship, and the positive expectations of another party regardless of the risk of being hurt [30], has been accepted widely in the literature, e.g., [31], [32].

Generally, trust is considered to be an important factor that can reduce the cost in the negotiation and monitoring process. It helps to increase the possibilities for reaching mutually beneficial agreements [33], fostering a feeling of oneness among team members [34], boosting team efficacy [4] and playing a critical role in decision-making [35], leadership development [36] and innovation effectiveness [31]. The effective management of ICC is based on building trust. Trust can help to coordinate team behaviors, enhance information sharing and develop good relationships [37]. In a multicultural environment, trust is crucial because it helps to eliminate the sense of uncertainty among team members [2]. Finally, trust is pivotal to knowledge sharing within organizations, especially those with global virtual teams [38], [39]. Importantly, the corollaries are also true; a lack of trust within teams (and consequently within multicultural teams) has significant adverse consequences on communication as evident in the literature. These are summarized in table 1.

Table 1. Consequences of a lack of trust.

Consequence of lack of trust	Context	Reference
Difficult to manage or supervise multicultural project teams	Empathy in leadership	[5]
When caused by cultural differences, it has a negative impact on communication in global virtual teams	Communication breakdown in global virtual teams	[18]
Decreases the possibilities of reaching mutually beneficial agreements	Trust building in international construction	[33]
Leads to failure in the development of strategic partnerships	Commitment, trust, and cultural sensitivity in strategic partnerships	[40]
Leads to poor relationship caused by issues of well-being, such as the sense of isolation and increased mental workload	Basis of trust in virtual work settings	[41]
When it emanates from top management, it generates an unsafe communication climate within the organizations.	Organizational climate in large-scale projects in the oil and gas industry	[42]
When caused by physical distance, it leads to poor cooperation in international projects	Building trust in international projects	[43]

Consequence of lack of trust	Context	Reference
A negative impact on project success in complicated project situations	Building trust in complex projects	[30]
Reduced knowledge sharing in the intercultural environment	Knowledge sharing across subgroups in global virtual teams	[39]
When caused by time-zone differences, it can negatively influence a healthy work-life balance	Working in global virtual teams	[44]
Leads to process and relationship conflicts among team members	Relationship between communication-conflict interaction and project success among construction project teams.	[37]
Causes problems such as clashes of communication styles, misinterpreted messages and bold statements perceived as impolite messages	Intercultural communication styles of global virtual teams during distributed decision making	[4]
Negatively influences overall team performance	Building trust in construction projects	[30]

In a multicultural context, trust is the foundation that makes team members feel a sense of belonging and security. Without trust, feelings of isolation and unwillingness to collaborate can arise, leading to project failure. To better measure trust in the multicultural environment, it is essential to identify which critical success factors of trust have been emphasized in the literature.

### 2.3 Critical success factors for trust

According to the classical research study conducted by Bullen and Rockart [45], the term, critical success factor (CSF), is conceptualized as “key areas where “things must go right” to successfully achieve objectives and goals”. Bullen and Rockart [45] also underlined a method of reviewing, classifying and aggregating literature to acquire CSFs. Following their process, our research conducted a thorough literature review on the success factors of trust in the field of project management. Therein, we identified, defined, categorized, and ranked these enablers. Finally, and in line with the literature, four key success factors emerged as the most prominent enablers namely emotional intelligence, empathy, interaction, and transparency. Table 2 defines these four CSFs and presents the context, research methods and findings derived from relevant previous studies. As shown in Table 2, emotional intelligence [24], [30], [46], [47], empathy [4], [5], [46], [48], interaction [5], [24], [49] and transparency [25], [50], [51], [52] have been proven to positively influence trust. However, while most of these studies concentrated on investigating project teams, little attention was given specifically to *multicultural* project teams. Although Ochieng and Price [5] focused on multicultural construction project teams in both Kenya and the UK, they examined critical success factors (CSFs) of trust, they employed qualitative methods. Therefore, quantitative empirical studies are urgently needed in order to extend the external validity of trust in ICC in the context of multicultural project teams.

Table 2. The definitions of critical success factors of trust in ICC and its related studies.

Success factors	Definitions	Previous studies	Context	Research methods	Findings
Emotional intelligence	The ability to recognize, understand, control and exploit emotions [50] to guide one's thoughts and actions in a positive direction [27].	Clarke [46]	Project teams (in Management Institute)	Quantitative study (67 UK project managers)	Emotional intelligence explained additional variance in project management competence.
		Rezvani et al. [30]	Project teams (in hydropower industry)	Quantitative study (408 project managers and project members)	Emotional intelligence relates positively to trust at different levels of analysis.
		Rezvani et al. [47]	Project teams (in Australian defense industry)	Quantitative study (337 project managers)	Emotional intelligence has a positive impact on trust.
		Wong et al. [24]	Project teams	Quantitative study (163 project manager and project members)	Emotional intelligence is important for trust-building in project teams.
Empathy	The ability to perceive, understand, experience and respond to the emotional state, ideas, values and culture of another person [2], [51].	Akgun et al. [48]	Software development project teams	Quantitative study (122 project managers and project members)	Empathy and trust are positively associated with each other.
		Clarke [46]	Project teams (in Management Institute)	Quantitative study (67 UK project managers)	Empathy explained additional variance in project management competence.
		Matveev and Nelson [4]	Multicultural teams	Quantitative study (124 American and Russian managers)	Cultural empathy as part of cross-cultural communication is positively related to team performance.
		Ochieng and Price [5]	Multicultural project teams (construction industry)	Qualitative research (20 interviews in Kenya and UK)	The creation and development of effective empathy is critical for building multicultural project teams.
Interaction	The process of exchanging information and emotions among individuals [22].	Krawczyk-Bryłka [49]	Intercultural teams	Quantitative study (survey of 200 international students)	Interaction is one of the most important elements of trust.
		Wong et al. [24]	Project teams	Quantitative study (163 professionals)	Interaction is important for trust building in project teams.

Success factors	Definitions	Previous studies	Context	Research methods	Findings
		Ochieng and Price [5]	Multicultural project teams (construction industry)	Qualitative research (20 interviews in Kenya and UK)	Trust depends on the interaction of individuals and interpersonal relationships.
Transparency	Transparency is defined as “openness” with the organization [48].	Auinger et al. [52]	-	Qualitative study	Transparency influences project success.
		Mesly [25]	Construction project teams	Qualitative and quantitative investigation (24 project managers)	Transparency influences the development of trust in teams.
		Parris et al. [51]	-	Systematic literature review	Transparency promotes trust in teams.
		Schilcher et al. [50]	International teams	Qualitative research (case study)	Lack of transparency results in obstacles in the cooperation process

### 3. Research model and hypotheses

Based on the comprehensive literature review of the enablers of trust in the field of project management, a theoretical framework is developed (see Figure 1). The framework shows how emotional intelligence, empathy, interaction, and transparency influences trust in ICC in the context of multicultural project teams. We next briefly discuss these four success factors and identify the hypotheses tested in the study.

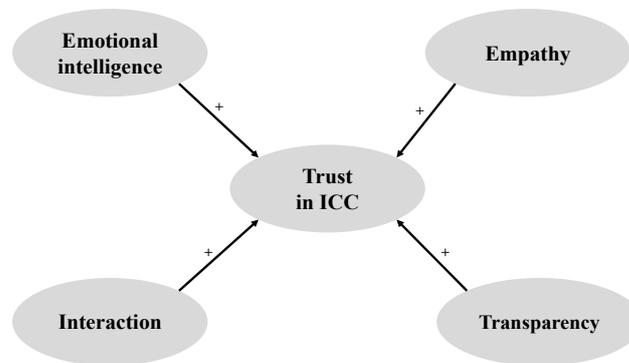


Figure 1. A theoretical framework of the success factors of trust in ICC in multicultural project teams

#### 3.1 Emotional intelligence (EI)

Research has shown that emotional intelligence (EI) contributes to the building of trust in project teams [30], [46], [48]. EI is defined as the ability to recognize, understand, control and exploit emotions [53]. This theory has been extended to assist organizations in cultivating EI to guide employees’ thoughts and actions in a positive direction [30]. It is believed

that EI underpins more effective teamwork [30], [46]. For example, emotional competencies, such as the proper articulation of emotions, are conducive to decreasing the misunderstandings caused by language differences [55]. In addition, EI has also been classified as an affect-based trust which creates emotional bonds among team members [24]. Thus, EI contributes to a sense of belonging.

It is therefore expected that EI should play a crucial role in building trust in intercultural communication. However, little research addresses or analyzes EI in multicultural project teams. Although several scholars argue that EI capabilities offer a means to further appreciate aspects of individual differences that can influence project performance [30], [46], few studies discuss what kind of individual emotional differences could impact the whole team and to what extent. Therefore, the first hypothesis we test is the following:

**Hypothesis 1: Emotional intelligence is positively associated with trust in ICC.**

### 3.2 Empathy

In globalized teams, a significant challenge for project managers lies in how to effectively guide and communicate with their team when inappropriate communication styles or misunderstandings may lead to a lack of trust. Some researchers, such as Clarke [46] and Young et al. [56], suggest empathy is a solution. Empathy is conceptualized as the ability to perceive, understand, experience and respond to the emotional state, ideas, values and culture of another person [4], [54]. In a multicultural environment, cultural empathy is important. This refers to the capability to see, understand and appreciate the world from others' cultural perspectives [4]. Empathy has been considered to be an essential competence for project managers, and is associated with better teamwork, attentiveness, and the management of transformational leadership in multicultural environments [46]. Researchers such as Clarke [46] and Ochieng and Price [5] have concluded that the key components of empathy are respect, openness, and curiosity towards other cultures. They contend that empathy is created by these essential components which contribute towards developing trust in multicultural teams.

Therefore, it would appear wise for project managers to cultivate higher levels of empathy when communicating with colleagues from different cultural backgrounds. However, there lacks sufficient literature studying the relationship between empathy and trust in ICC in multicultural project environments. Researchers have questioned whether empathy would completely solve the presence of misunderstandings and distrust in multicultural projects [15]. Furthermore, too much empathy might lead to weaker decision-making competency [46]. For example, if project managers pay too much attention to encountering different working styles, they might neglect other factors such as time and budgets that are more crucial to the project success. Consequently, we test the following hypothesis:

**Hypothesis 2: Empathy is positively associated with trust in ICC.**

### 3.3 Interaction

Interaction is defined as the process of exchanging information and emotions among individuals [24]. At a team level, effective interaction facilitates better knowledge transfer and cohesion in organizations [57]. Recent studies have emphasized that interaction is an essential construct for trust in project management. Areas of study include the communication process in construction projects [24]; team engagement in inter-organizational projects [31]; communication frequency in global virtual teams [57] and interaction engagement in multicultural teams [15]. These studies have shown that interaction is essential for building trust within multicultural project teams because it creates the channel for sharing information and emotions. Also, active interaction develops a stable environment for work and motivates the team for effective communication within complex projects. These benefits are lauded to lead to a more satisfying relationship between project managers and team members [3].

However, it is challenging to define one kind of interaction that best suits multicultural teams because communication styles are diversified and fluid rather than fixed [3] and different cultures have different preferences. Therefore, the theory of the host culture becomes dominant [11]. This in turn complicates understanding the relationship between interaction and trust in a multicultural environment. For example, if the employee works in a high context office, he/she

must rely heavily on non-verbal ways to express opinions. Here communication focuses on context, meaning, and tone in the message and not only the words themselves. Therefore, studies related to this specific topic are subject to cultural context. Many scholars follow Hall's theory [58] which considers high context (i.e., close connections over a long period of time) and low context (i.e., many connections of shorter duration) to discuss different communication styles. Following this theory, this study focuses on a "high context" because there is insufficient literature studying ICC in a high context environment. Consequently, the following hypothesis is tested:

**Hypothesis 3: Interaction is positively associated with trust in ICC.**

### *3.4 Transparency*

Transparency has been recognized as the foundation of a fair environment for ICC [19] and conceptualized as "openness" within the organizations [51]. With no consideration of personal issues, it emphasizes formalizing the process and providing equal opportunities. Creating a transparent environment for the team develops trust as a sense of security, corresponding with Maslow's hierarchy of human needs [55]. When project managers meet their security needs, they can then move to the higher level of social needs. At this stage, they become more collaborative with others. Researchers have studied different aspects of transparency in organizations regarding the topic of trust in project management. Examples include transparency in organizational policy and process clarity in construction projects [37]; transparent rewards in inter-organizational projects [31]; transparency across different stakeholders in R&D projects [55], overall transparency in international projects [25] and role clarity in global virtual teams [19]. According to this body of work, transparency is crucial to developing trust because it creates an open and honest communication platform for multicultural teams. Transparency is thus positively related to the formation of trust. Furthermore, transparency in policy, process, responsibility, and rewards distribution supports project success. In global organizations, a lack of transparency can cause confusion which can lead to conflicts and culminate in project failure. Therefore, transparency contributes toward building trust in intercultural communication. This leads to our next hypothesis:

**Hypothesis 4: Transparency is positively associated with trust in ICC.**

## **4. Methodology**

### *4.1 Data Collection*

In our research, the proposed hypotheses are examined using data elicited from experienced project managers working in multinational companies in the automotive industry. The sampling frame consists of project managers from multiple functions who had at least three years' experience leading multicultural project teams. There are two main reasons why project managers were chosen as the target for this study. First, the value of their competencies makes them one of the most crucial enablers for project success as advocated by many researchers [59] [60]. Second, while previous studies that explored the enablers for trust have also targeted the project manager [25], [46], [47] we believe that this line of research should be extended to include project managers operating in multicultural project teams. It is hoped that the results from this study can provide practical suggestions to project managers who seek to optimize effective intercultural communication operating in multicultural environments. Relevant subjects were identified via the human resource functions in the organizations. Empirical data was collected using an online survey instrument. The questionnaire included two types of questions. Firstly, two nominal questions associated with the basic features of the target audience namely gender and relevant work experience were posed. Secondly, forty statements derived from the literature were presented and respondents were asked to assess the extent to which they agreed with them using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Several actions were taken to mitigate non-response bias. A cover letter accompanied the email explaining the rationale, defining the core concepts and requesting participation in the study. Respondents were informed that the questionnaire would take less than 10 minutes to complete. The respondent's anonymity was guaranteed. Important psychometrics parameters [51] were also followed, such as adopting familiar terminology and shortening the statements to enhance meaning when modifying items on the survey.

The questionnaire was pretested (n=6) and pilot tested (n=10) to ensure the technical reliability of the instrument and adequate comprehension of the questions. Minor changes were made following this analysis which helped to strengthen the construct validity and decrease possible misunderstandings. The instrument was distributed to 880 project managers with experience in managing multicultural project teams between March and May 2019. After one month, we received 117 usable responses, representing a response rate of 13%. This final sample included diversified profiles of top and middle-level employees. 60% of respondents were male and 40% female; 65% of the respondents had between 5- and 10-years' experience, 22% had more than 10-years' experience and 13% has between 3- and 5-years' experience.

#### 4.2 Measures

**Emotional intelligence** was assessed using four items ( $\alpha = .739$ ) developed by Wong et al. [24] and Rezvani et al. [30], from the perspective of understanding, managing and perceiving emotions. See Table 3 for a list of items used in this study.

**Empathy** was measured using five items ( $\alpha = .751$ ) proposed by Matveev and Nelson [4] and Wong et al. [24], comprising the dimensions of respect, communication, appreciation, and collaboration.

**Interaction** was assessed using five items ( $\alpha = .760$ ) created by Wong et al. [24] and Wu et al. [37]. The items measure information, knowledge sharing and communication (see Table 3).

**Transparency** was assessed using five items ( $\alpha = .759$ ) proposed by Park and Lee [57] and Caldwell and Clapham [61] from the perspective of responsibility, rewards, terms, and conditions.

**Trust** was measured by employing five items ( $\alpha = .885$ ) developed by Rezvani et al. [30] and Tsai et al. [62].

Table 3: Constructs and measurement.

Constructs	Items	Reference
Emotional intelligence	I can explain the emotions I feel to team members. I can overcome my frustration when I am frustrated with my team members. I am aware of team members' true feelings. I can handle difficulties rationally.	[30]
Empathy	I respect other people's values. I can communicate effectively in a one-to-one form. I can communicate effectively in the group form. I am able to appreciate dissimilar working styles. I feel comfortable working with people who come from different cultural backgrounds.	[4], [24]
Interaction	I can share information accurately with the team in meetings. I have enough information to make timely decisions. I can have better information sharing by regular meetings. I adopt visual methods to reduce communication barriers in the workplace. I can acquire more useful knowledge by more access to information platforms.	[24], [37]
Transparency	I can clearly define team members' responsibilities. I can clearly define team members' tasks. I make the project rewards equitable. I can clearly explain information in the contracts to those who may be affected. I clarify terms and conditions before the commencement of work.	[57], [61]
Trust	If I get into difficulties at work, I know my team would try to help me out. I can trust my team to help me if I need it. I have full confidence in the skills of my team. I can rely on most of my team members to do as they say they should do. I can rely on my team not to make my job more difficult by careless work.	[30], [62]

**Control variables.** We included controls for the effects of (a) gender and (b) working tenure. Previous researchers, such as, Maddux and Brewer [63] found that there is a significant difference between men and women concerning trust; and Chan and Mak [64] suggested that subordinates' organizational tenure influences their trust in leaders. Therefore, to address these possible alternate explanations for our constructs, we controlled for these two constructs. They are measured by two nominal questions in the survey.

Partial least squares structural equation modeling (PLS-SEM) analysis was used to assess the reliability of our instrument and to establish the relationship between the different CSFs and trust. PLS is a well-established technique for estimating path coefficients in structural models [65]. This approach has been applied by many researchers in recent years because of its ability to handle complex models with many constructs and indicators. In addition, it can also model latent constructs under conditions of non-normality and it can handle small to medium sample sizes [65], [66]. Furthermore, it has been widely adopted in the Management discipline, see [67], [68], [69] and it is particularly suited to exploratory research that focuses on theory development [66]. Considering these benefits, the PLS technique was adopted in our study, and we used Smart PLS version 3.0 to analyze data collected.

In order to validate our measurement model, we assessed internal consistency reliability, content validity, discriminant and convergent validity. First, we tested for internal consistency reliability using composite reliability measures (CR) [66]. Our results show that CR values are 0.817 (emotional intelligence), 0.833 (empathy), 0.836 (interaction), transparency (0.838) and 0.916 (trust), which are above the acceptable levels [70]. Second, the content validity of our instrument was developed from previous studies. Moreover, the measures in our research were constructed by utilizing constructs that have been validated by other scholars. Third, the discriminant and convergent validity were examined by indicators of Heterotrait-monotrait ratio (HTMT) as well as average variance extracted (AVE) respectively [66]. Our results indicate that the HTMT values ranging from 0.565 to 0.787 are lower than the cut-off value 0.85 [71]. Moreover, the AVE values are acceptable [67], as they exceed 0.5 (emotional intelligence, 0.538; empathy, 0.5; interaction, 0.507; transparency, 0.511; and trust, 0.685).

### 4.3 Results

SPSS 23 was used to calculate the means, standard deviation, and zero-order correlations of our constructs (see Table 4). As illustrated in Table 4, the results show that emotional intelligence is not significantly related to trust ( $r = -.13, p > .05$ ). However, empathy ( $r = .38, p < .001$ ), interaction ( $r = .41, p < .001$ ) and transparency ( $r = .35, p < .001$ ) are positively associated with trust. To further test emotional intelligence, empathy, interaction, and transparency as critical success factors of trust in intercultural communication in multicultural project teams, we conducted the inner structural model analysis. The results are reported following the guidelines proposed by Hair et al., [66] (Table 5 and Figure 1).

Table 4: Means, standard deviations and correlations of study constructs.

Constructs	Mean	SD	1	2	3	4	5
1. Emotional Intelligence	3.92	0.71	-				
2. Empathy	3.88	0.70	-.14	-			
3. Interaction	3.95	0.58	-.02	.49***	-		
4. Transparency	4.37	0.50	.12	.16	.36***	-	
5. Trust in ICC	4.27	0.43	-.13	.38***	.41***	.35***	-

Note: N = 117; \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

First, as shown in Table 5 and Figure 2, emotional intelligence does not significantly exert an effect on trust ( $\beta = -0.17, p > .05$ ). Hypothesis 1 (Emotional intelligence is positively associated with trust in ICC) is thus not confirmed. Second, our result illustrates that empathy marginally and positively influences trust ( $\beta = 0.17, p < .10$ ), which partially supports hypothesis 2 (Empathy is positively associated with trust in ICC). Third, we find that interaction ( $\beta = 0.24, p < .01$ ) and transparency ( $\beta = 0.24, p < .05$ ) have significant and positive effects on trust. Therefore, hypothesis 3 (Interaction is positively associated with trust in ICC) and hypothesis 4 (Transparency is positively associated with trust in ICC) are fully supported. Furthermore, among empathy, interaction and transparency, our result suggest that interaction is the most influential critical success factor for trust in ICC.

Table 5: Results of the inner structural model analysis.

<i>Critical success factor</i>	$\beta$	Trust in ICC	
		SD	t
Emotional Intelligence	-0.17	0.12	1.459
Empathy	0.17†	0.09	1.886
Interaction	<b>0.24**</b>	0.09	2.643
Transparency	0.24*	0.09	2.592
<i>Control variables</i>			
Gender	-0.05	0.08	0.664
Working tenure	-0.13†	0.08	1.658
$R^2$		.305	

Note: N = 117; † $p < .10$ , \* $p < .05$ , \*\* $p < .01$

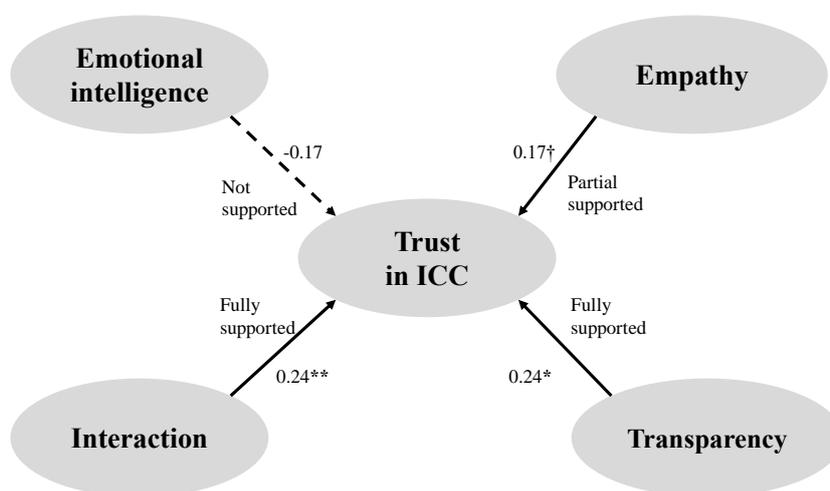


Figure 2. The findings of our research

### 5. Discussions and implications

Integrating literature on communication theories and project management concepts, this research sheds light on our understanding of what, whether and how hypothesized critical success factors influence trust in ICC. To our knowledge, this study is among the first efforts to theoretically analyze and empirically investigate the enablers of trust in ICC in multicultural project teams. In doing so, we find that interaction and transparency have significant and positive effects on trust in ICC; empathy marginally and positively influences trust. Interestingly and unexpectedly emotional intelligence does not exert an effect on it. In the following section, we discuss these findings, seek to place them in perspective and describe the results and their significance in relation to the overall study.

First, our results indicate that high-quality interaction, is the most important critical success factor as it significantly and positively influences trusts in ICC. This result suggests that information, knowledge sharing, and communication (as elements of interaction) are essential to building trust in multicultural project teams. This finding is consistent with previous research conducted by Wong et al. [49] and Krawczyk-Bryłka [49]. It implies that ongoing interaction helps project teams to distribute, understand and obtain meaningful information and knowledge [24]. It forms a bridge for

information exchange and thus fosters trust-building in project teams. Interestingly, table 4 shows that empathy and interaction are significantly and positively associated with each other ( $r = 0.49, p < 0.001$ ). It is a noteworthy finding because this association has not been emphasized in the literature. The result suggests that the competency of empathy may be enhanced when there are more opportunities to interact with others. Therefore, project managers need to be cognizant of the importance of working with people from different cultures by communicating more frequently with them. In sum, trust can be more readily built within multicultural project teams by fostering improved empathy and increased levels of interactions within teams.

Moreover, the strong linear correlation result between transparency and trust indicates that transparency forms the foundation of trust within multicultural project teams. In our survey, we find that project managers regard maintaining transparency in responsibilities, rewards, terms, and conditions as important principles. These findings support previous work, e.g., Wu et al. [37], who proposed that transparency in organizational policy and process clarity fosters trust; and Maurer [31] who argued that transparent rewards promote trust building. The reasons that transparency is an important critical success factors for building trust in ICC lies in the fact that transparency brings a fair and trustworthy platform for multicultural project teams. However, excessive transparency may create upheavals, such as disclosing industrial secrets [25]. We, therefore, encourage future studies to explore the extent to which transparency is most beneficial to intercultural project teams. Furthermore, based on our findings that maintaining transparency is of vital importance to developing trust in multicultural teams, we recommend that project managers strive to make work tasks and responsibilities very clear to team members. Meanwhile, project rewards must be equitable and channels for information sharing and administration processes should be transparent. This will be beneficial to both building trust and to effectively managing multicultural teams.

The study results further indicate that cultural empathy is a critical success factor for trust in ICC. While the path is weak, it is positive and significant at the .1 level thus supporting Hypothesis 2 that proposes that empathy exerts a positive impact on trust. The significant role of empathy when developing trust within multicultural teams has been emphasized by many authors including Clarke [46], Ochieng and Price [5], Bell and Riol [15] and Young et al. [56]. Empathetic project managers respect and appreciate colleagues from all cultures. This competency opens the channel for honest and open communication within the team. When misunderstandings arise, their empathy will mitigate the conflicts. Consequently, people form closer bonds and mutual trust can be developed. Interestingly, Table 4 shows that there is no significant correlated relationship between empathy and EI from the test ( $r = -.14, p > .05$ ). Furthermore, we also find that the item of “taking cultural differences into consideration when making decisions” had the lowest score. Though project managers admit and accept the existence of cultural diversity, it is not important for them when it comes to big decisions like promotion, task assignment, etc. The result aligns with the argument that empathy should not influence the decision-making process [56].

Finally, the results indicate that emotional intelligence does not significantly impact the formation of trust in multicultural teams. One possible reason for the disagreement regarding EI might be the limited measurements. Also, EI could possibly have a moderating role between empathy and trust, which aligns with the argument that EI is likely to promote empathy in relationship management, leading to effective ICC [30]. Although EI did not directly create trust, its impact on teamwork effectiveness is worth further attention.

### 5.1 Theoretical contribution

First, by joining a handful of researchers in the field of ICC, this study addresses theoretical gaps relating to the enablers of trust and advances the theory of conceptualizing trust in ICC. Specifically, it develops and contributes a conceptual model of key enablers of trust in ICC and increases our understanding about the CSFs for developing trust in multicultural project teams. Our findings extend the line of enquiry by demonstrating that interaction and transparency have the most significant effects on trust thus supporting cogent work in the field of ICC and project management. We also found that empathy marginally and positively influences trust, and our results indicate that emotional intelligence does not significantly impact the formation of trust in multicultural teams. These results are novel in the sense that no empirical work has explicitly quantified the extent to which certain key antecedents relate to trust in the project management literature.

Another important theoretical contribution is that this study provides interesting insights into the relationship between empathy and interaction. We found that these constructs are significantly and positively associated with each other. To the best of our knowledge, this has not been emphasized in the literature before now.

### 5.2 Managerial implications

This research also benefits project managers by suggesting ways in which trust can be built in multicultural environments which will support more effective ICC. Improved ICC should lead to positive impacts on project success, customer satisfaction and competitive advantage as indicated in the literature review.

A lack of trust has been identified as a major reason for feelings of isolation and an unwillingness to collaborate within teams which are therefore key barriers to ICC. Only when team members start to understand and trust each other, can they form an integrated team. However, cultural differences, language barriers, and physical distances make it difficult to generate trust in the multicultural environment. Moreover, it is not always cultural differences alone that make people feel isolated. Sometimes anxiety exists based on a fear of rejection. Thus, project managers are encouraged to pay more attention to individual feelings of distrust between team members and actively seek to dispel it.

In conclusion, as our findings have indicated the significance of interaction, transparency and empathy to a lesser extent are pivotal in developing trust in multicultural teams, managers and leaders are strongly encouraged to build more transparent working environments, to facilitate more interactions of high quality within teams and to cultivate cultural empathy competency. By so doing, organizations can foster higher levels of trust, leading to more effective ICC and more successful project management.

## 6. Limitations and Future Research

The results of this study offer clear indications to managers and researchers on approaches to trust-building that may be beneficial in the context of ICC within multicultural project teams. However, as with all studies some limitations should be noted, along with directions for future research.

This study examined trust as a complex social phenomenon by reducing it to several quantitative scale items. However, it may have neglected different types of trust and other possible mediators/moderators of trust. For example, we did not investigate a moderating role by EI in this study. This is because our research focuses on identifying the critical success factors and their direct influence on trust in ICC. We, therefore, encourage future research to examine possible mediating/moderating factors. Furthermore, studying the model through a multilevel analysis may be worthwhile. For example, empathy and interaction could be studied at the individual level, while transparency could be studied at the group level offering a more comprehensive understanding of trust in ICC. Further investigations might lead to some inspiring results.

It is also challenging to apply the theory of trust to different cultural backgrounds. Therefore, understanding of this complex topic could be improved by comparison research. The theory of anxiety/uncertainty management in the context of cultural differences might be helpful. Also, different cultural backgrounds may affect emotional abilities, empathy competency, communication styles, and transparency assessment [30], [72]. Therefore, a comparative analysis between differing cultural backgrounds would be helpful to advance this research area.

Finally, to validate our research framework, we only controlled two variables, gender and working tenure. We omitted the degree of project teams' intercultural profile, their communication behaviors and team members location (i.e., on-site/dispersed). We thus encourage future studies to include these controls to get more accurate results. Moreover, since our research focused only on project managers from multinational organizations, it limits the generalizability of the results. Therefore, future research can make a valuable contribution by examining the critical success factors and barriers from a wider variety of contexts. A larger sample size would be preferred as would the use of in-depth qualitative approaches such as in-depth interviews to explore employees' opinions about trust.

## 7. Conclusion

With the number of intercultural teams constantly rising in firms today, there is certainly a need to better understand how project management processes need to be adapted to create trust and increase project success. This study, therefore, investigates several important enablers that influence trust in Intercultural Communication in a multinational corporation. Specifically, we examine the impact of emotional intelligence, empathy, interaction, and transparency on trust. Using data from the field, provided by experienced project managers, we find that cultural empathy, high-quality interaction, and transparency are strongly associated with the development of trust in intercultural communication. These findings 1) extend the literature on intercultural communication in the context of project teams, 2) advance our understanding of how to promote trust and subsequently contribute to intercultural communication, and more importantly 3) provides insightful thoughts to researchers and practitioners regarding critical success factors that can be used by project managers to actively manage how they build trust in multicultural projects.

## References

- [1] C. Iriarte and S. Bayona, "IT projects success factors: a literature review," *International Journal of Information Systems and Project Management*, vol. 8, no. 2, pp. 49-78, 2020.
- [2] W. E. Hefley and M. Bottion, "Skills of junior project management professionals and project success achieved by them," *International Journal of Information Systems and Project Management*, 9(1), 4. 2021.
- [3] N. Zakaria, "Emergent Patterns of Switching Behaviors and Intercultural Communication Styles of Global Virtual Teams During Distributed Decision Making," *Journal of International Management*, vol. 23, no. 4, pp. 350-366, 2017.
- [4] A. Matveev and P. Nelson, "Cross Cultural Communication Competence and Multicultural Team Performance: Perceptions of American and Russian Managers," *International Journal of Cross Cultural Management*, vol. 4, no. 2, pp. 253-270, 2004.
- [5] E. G. Ochieng and A. D. F. Price, "Managing cross-cultural communication in multicultural construction project teams: The case of Kenya and UK," *International Journal of Project Management*, vol. 28, no. 5, pp. 449-460, 2010.
- [6] L. Matthews and Y. Thakkar, "The Impact of Globalization on Cross-Cultural Communication, Globalization", In *Globalization - Education and Management Agendas*, H. Cuadra-Montiel, Ed., Rijeka, Croatia: InTech, 2012, ch.13, pp. 325-340.
- [7] A. Gut, M. Wilczewski, and O. Gorbaniuk, "Cultural differences, stereotypes and communication needs in intercultural communication in a global multicultural environment: The employees' perspective," *Journal of Intercultural Communication*, vol. 43, no. 1, pp. 1-20, 2017.
- [8] M. Collier, "Intercultural communication competence: Continuing challenges and critical directions," *International Journal of Intercultural Relations*, vol. 48, pp. 9-11, 2015.
- [9] R. Fellows and A. Liu, "Sensemaking in the cross-cultural contexts of projects," *International Journal of Project Management*, vol. 34, no. 2, pp. 246-257, 2016.
- [10] D. Kealey, "Some strengths and weaknesses of 25 years of Research on Intercultural Communication Competence: Personal Reflections," *International Journal of Intercultural Relations*, vol. 48, pp. 14-16, 2015.
- [11] G. G. Barker, "Cross-Cultural Perspectives on Intercultural Communication Competence," *Journal of Intercultural Communication Research*, vol. 45, no. 1, pp.13-30, 2016.
- [12] V. J. Friedman, and A. B. Antal, "Negotiating reality: A theory of action approach to intercultural competence," *Management Learning*, vol. 36, no. 1, pp. 69–86, 2005.

- [13] L. A. Arasaratnam, "Ten years of research in intercultural communication competence (2003 - 2013): A retrospective," *Journal of Intercultural Communication*, vol. 35, no. 5, 2014.
- [14] J. Martin, "Revisiting intercultural communication competence: Where to go from here," *International Journal of Intercultural Relations*, vol. 48, pp. 6-8, 2015.
- [15] R. Bell and C. Riol, "The impact of cross-cultural communication on collective efficacy in NCAA basketball teams," *International Journal of Cross Cultural Management*, vol. 17, no. 2, pp. 175-195, 2018.
- [16] S. Toor, and S. O. Ogunlana, "Critical COMs of success in large-scale construction projects: Evidence from Thailand construction industry," *International Journal of Project Management*, vol. 26, no. 4, pp. 420-430, 2008.
- [17] D. Shah and M. Barker, "Cracking the cultural code: Indian IT expatriates' intercultural communication challenges in Australia," *International Journal of Cross Cultural Management*, vol. 17, no. 5, pp. 215-236, 2017.
- [18] T. U. Daim, A. Ha, S. Reutiman, B. Hughes, U. Pathak, W. Bynum and A. Bhatla, "Exploring the communication breakdown in global virtual teams," *International Journal of Project Management*, vol. 30, no. 2, pp. 199-212, 2012.
- [19] L. S. Henderson, R. Stackman and R. Lindekilde, "The centrality of communication norm alignment, role clarity, and trust in global project teams," *International Journal of Project Management*, vol. 34, no. 8, pp. 1717-1730, 2016.
- [20] J. Kalkman and E. Waard, "Inter-organizational disaster management projects: Finding the middle way between trust and control," *International Journal of Project Management*, vol. 35, no. 5, pp. 889-899, 2017.
- [21] L. Siddique, B. A. Hussein, "A qualitative study of success criteria in Norwegian agile software projects from suppliers' perspective," *International Journal of Information Systems and Project Management*, vol. 4, no. 2, pp. 63-79, 2016.
- [22] Paine, K. D. (2003). *Guidelines for measuring trust in organizations*. Available: [http://www.instituteforpr.com/pdf/2003\\_measuring-trust.pdf](http://www.instituteforpr.com/pdf/2003_measuring-trust.pdf).
- [23] A. E. Akgiin, H. Keskin, A. Cebecioglu, and D. Dogan, "Antecedents and consequences of collective empathy in software development project teams". *Information & Management*, vol. 35, no. 2, pp. 247-259, 2015.
- [24] W. K. Wong, S. O. Cheung, T. W. Yiu and H. Y. Pang, "A framework for trust in construction contracting," *International Journal of Project Management*, vol. 26, no. 8, pp. 821-829, 2008.
- [25] O. Mesly, "Exploratory findings on the influence of physical distance on six competencies in an international project," *International Journal of Project Management*, vol. 33, no. 7, pp. 1425-1437, 2015.
- [26] G. M. Chen, *Foundations of intercultural communication competence*. Hong Kong, China: Review Academic Publishers, 2010.
- [27] W. B. Gudykunst, "Intercultural communication," In *Handbook of International and Intercultural Communication*, W. B. Gudykunst and B. Mody Eds., Thousand Oaks, CA: Sage publication, 2002, pp. 179-182.
- [28] J. Koester and M. W. Lustig, "Intercultural communication competence: Theory, measurement, and application," *International Journal of Intercultural Relations*, vol. 48, pp. 20-21, 2015.
- [29] D. M. Rousseau, S. B. Sitkin, R. S. Burt and C. Camerer, "Not So Different After All: A Cross-discipline View of Trust," *Academy of Management Review*, vol. 23, no. 3, pp. 393-404, 1998.
- [30] A. Rezvani, P. Khosravi and N. M. Ashkanasy, "Examining the interdependencies among emotional intelligence, trust, and performance in infrastructure projects: A multilevel study," *International Journal of Project Management*, vol. 36, no. 8, pp. 1034-1046, 2018

- [31] I. Maurer, "How to build trust in inter-organizational projects: The impact of project staffing and project rewards on the formation of trust, knowledge acquisition and product innovation," *International Journal of Project Management*, vol. 28, no. 7, pp. 629-637, 2010.
- [32] J. Du, and C. Williams, "Innovative Projects Between MNE Subsidiaries and Local Partners in China: Exploring Locations and Inter-Organizational Trust," *Journal of International Management*, vol. 23, no. 1, pp. 16-31, 2017.
- [33] P. T. Chow, S. O. Cheung and K. Y. Chan, "Trust-building in construction contracting: Mechanism and expectation," *International Journal of Project Management*, vol. 30, no. 8, pp. 927-937, 2012.
- [34] O. Stawnicza, "Distributed team cohesion—not an oxymoron. The impact of information and communications technologies on teamness in globally distributed IT projects," *International Journal of Information Systems and Project Management*, vol. 3, no. 2, pp. 23-39, 2015.
- [35] H. Smyth, M. Gustafsson and E. Ganskau, "The value of trust in project business," *International Journal of Project Management*, vol. 28, no. 2, pp. 117-129, 2010.
- [36] M. Green, "Adaptation versus authenticity: Achieving leader effectiveness in intercultural encounters with followers – towards an integrated model," *International Journal of Cross-Cultural Management*, vol. 17, no. 2, pp. 257-271, 2017.
- [37] G. Wu, C. Liu, X. Zhao and J. Zuo, "Investigating the relationship between communication-conflict interaction and project success among construction project teams," *International Journal of Project Management*, vol. 35, no. 8, pp. 1466-1482, 2017.
- [38] J. Park and J. Lee, "Knowledge sharing in information systems development projects: explicating the role of dependence and trust," *International Journal of Project Management*, vol. 32, no. 1, pp. 153-165, 2014.
- [39] J. Eisenberg and E. Mattarelli, "Building Bridges in Global Virtual Teams: The Role of Multicultural Brokers in Overcoming the Negative Effects of Identity Threats on Knowledge Sharing Across Subgroups," *Journal of International Management*, vol. 23, no. 1, pp. 399-411, 2017.
- [40] A. Sørderberg, S. Krishna and P. Bjørn, "Global Software Development: Commitment, Trust and Cultural Sensitivity in Strategic Partnerships," *Journal of International Management*, vol. 19, no. 4, pp. 347-361, 2013.
- [41] R. M. Verburg, P. Bosch-Sijtsema and M. Vartiainen, "Getting it done: Critical success factors for project managers in virtual work settings," *International Journal of Project Management*, vol. 31, no. 1, pp. 68-79, 2013.
- [42] M. B. Hannevik, J. A. Lone, R. Björklund and T. Hoff, "Organizational climate in large-scale projects in the oil and gas industry: A competing values perspective," *International Journal of Project Management*, vol. 32, no. 4, pp. 687-697, 2014.
- [43] O. Mesly, "Exploratory findings on the influence of physical distance on six competencies in an international project," *International Journal of Project Management*, vol. 33, no. 7, pp. 1425-1437, 2015.
- [44] A. Jimenez, D. M. Boehe, V. Taras and D. V. Caprar, D. V., "Working Across Boundaries: Current and Future Perspectives on Global Virtual Teams," *Journal of International Management*, vol. 23, no. 4, pp. 341-349, 2017.
- [45] Bullen, C. V., and Rockart, J. F. (1981). A primer on critical success factors. Available: <https://dspace.mit.edu/bitstream/handle/1721.1/1988/SWP-1220-08368993-CISR-069.pdf?sequen>.
- [46] N. Clarke, "Emotional intelligence and its relationship to transformational leadership and key project manager competences," *Project Management Journal*, vol. 41, no. 2, pp. 5-20, 2010.

- [47] A. Rezvani, A. M. Chang, A. Wiewiora, N. M. Ashkanasy, P.J. Jordan and R. Zolin, "Manager emotional intelligence and project success: The mediating role of job satisfaction and trust," *International Journal of Project Management*, vol. 34, no. 7, pp. 1112-1122, 2016.
- [48] Akgün, A. E, Keskin, H, Cebecioglu, A. Y, and Dogan, D. "Antecedents and consequences of collective empathy in software development project teams". *Information & Management*, vol. 52, no. 2, pp. 247-259, 2015.
- [49] B. Krawczyk-Bryłka, "Trust triggers and barriers in intercultural teams". *Journal of Intercultural Management*, vol. 8, no. 2, pp. 105-123, 2016.
- [50] C. Schilcher, A. Poth, S. Sauer, K. Stiefel and M. Will-Zocholl, "Trust in international teams: Cultural, spatial, and organizational issues," *International Journal of Business Research*, vol. 11, no. 4, pp. 29-38, 2011.
- [51] D. L. Parris, J. L. Dapko, R. W. Arnold and D. Arnold, "Exploring transparency: a new framework for responsible business management," *Management Decision*. vol. 54, no. 1, pp. 222-247, 2016.
- [52] A. Auinger, D. Nedbal, A. Hochmeier, "An Enterprise 2.0 project management approach to facilitate participation, transparency, and communication," *International Journal of Information Systems and Project Management*, vol. 1, no. 2, pp. 43-60, 2013.
- [53] J. Mayer, P. Salovey, "What is emotional intelligence?" in *Emotional Development and Emotional Intelligence: Implications for Educators*, P. Salovey, D. Sluyter, Eds., New York, US: Basic Books, 1997, pp. 3-31.
- [54] Barker, R. L. (2008). *The social work dictionary*. Washington, DC: NASW Press.
- [55] N. Ashkanasy and A Dorris, "Emotions in the Workplace," *Annual Review of Organizational Psychology and Organizational Behavior*, vol. 4, no. 1, pp. 67-90, 2017.
- [56] C. Young, B. Haffejee and D. Corsun, D, "Developing Cultural Intelligence and Empathy Through Diversified Mentoring Relationships" *Journal of Management Education*, vol. 42, no. 3, pp. 319-346, 2018.
- [57] J. Park and J. Lee, "Knowledge sharing in information systems development projects: explicating the role of dependence and trust," *International Journal of Project Management*, vol. 32, no. 1, pp. 153-165, 2014.
- [58] E. Hall, "Adumbration as a feature of intercultural communication," In *Basic readings in communication theory*, C. Mortensen, Ed., 2nd ed. Basic readings in communication theory, London, UK: HarperCollins Publishers, 1979, pp. 420-432.
- [59] N. Gruden and A. Stare, "The influence of behavioral competencies on project performance," *Project Management Journal*, vol. 49, no. 3, pp. 98-109, 2018.
- [60] B. G. Hwang and W. J. Ng, "Project management knowledge and skills for green construction: Overcoming challenges". *International Journal of project management*, vol. 31, no. 2, pp. 272-284, 2013.
- [61] C. Caldwell and S. E. Clapham, "Organizational trustworthiness: an international perspective," *Journal of Business Ethics*, vol. 47, no. 4, pp. 349-364, 2003.
- [62] W. C. Tsai, N. W. Chi, A. A. Grandey and S. C. Fung, "Positive group affective tone and team creativity: negative group affective tone and team trust as boundary conditions," *Journal of Organizational Behavior*, vol. 33, no. 5, pp. 638-656, 2012.
- [63] W. W. Maddux and M. B. Brewer, "Gender differences in the relational and collective bases for trust," *Group Processes & Intergroup Relations*, vol. 8, no. 2, pp. 159-171, 2005.

- [64] S. C. Chan and W. M. Mak, "The impact of servant leadership and subordinates' organizational tenure on trust in leader and attitudes," *Personnel Review*, vol. 42, no. 2, pp. 272-287, 2014.
- [65] W. W. Chin, "The partial least squares approach for structural equation modeling," In *Methodology for business and management. Modern methods for business research*, G.A. Marcoulides, Ed., Mahway, NJ: Lawrence Erlbaum Associates Publishers, 1998, p. 295-336.
- [66] J. F. Hair, J. J. Risher, M. Sarstedt and C. M. Ringle, "When to use and how to report the results of PLS-SEM," *European business review*, vol. 31, No. 1, pp. 2-24, 2019.
- [67] J. E. Hoch and S. W. Kozlowski, "Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership," *Journal of Applied Psychology*, vol. 93, No. 3, pp. 335-350, 2014.
- [68] V. K. Gupta, R. Huang and S. Niranjana, "A longitudinal examination of the relationship between team leadership and performance", *Journal of Leadership & Organizational Studies*, vol. 17, No. 4, pp. 335-350, 2010.
- [69] L. Chidambaram and L. L. Tung, "Is out of sight, out of mind? An empirical study of social loafing in technology-supported groups," *Information systems research*, vol. 16, No. 2, pp. 149-168, 2005.
- [70] C. Fornell and D. F. Larcker, "Structural equation models with unobservable variables and measurement error," *Algebra and statistics*, vol. 18, no. 3, pp. 382-388, 1981.
- [71] J. Henseler, C. M. Ringle and M. Sarstedt, "A new criterion for assessing discriminant validity in variance-based structural equation modeling," *Journal of the Academy of Marketing Science*, vol. 43, no. 1, pp. 115-135, 2015.
- [72] K. A. Crowne, "Cultural exposure, emotional intelligence, and cultural intelligence: An exploratory study," *International Journal of Cross Cultural Management*, vol. 13, No. 1, pp. 5-22, 2013.

**Biographical notes****Wenyuan Yu**

Wenyuan Yu is a Senior Researcher at the Enterprise Research Centre at NUI Galway. Her research focuses on optimizing intercultural communication mechanisms in project teams. Prior to that she spent several years working as a project manager in the automotive sector. She earned a bachelor's degree in Vehicle Engineering (Automotive) from Tongji University, Shanghai China and a M.Appl.Sc. in Enterprise Systems from NUI Galway. She works as a consultant in a multicultural workplace where she bridges the gap between academia and industry.

**Kathryn Cormican**

Kathryn Cormican (PhD) is Director of the Enterprise Research Centre in the School of Engineering at NUI Galway and a member of Lero - the Irish Software Research Centre. She leads a large multidisciplinary research team working in the area of technology innovation management. This involves the design, development, validation of novel processes and information systems to enable the creation of smarter user-centered solutions. She is internationally recognized for her contribution to research and has won many prestigious best paper awards. Kathryn collaborates with senior industrial partners and has published extensively in high impact journals in her field. She has secured over €2 million in research income and is currently PI on two EU funded projects. Her contribution to both research and practice has been recognized through several invited keynote addresses at international conferences and symposia. Kathryn also directs an award-winning MSc programme specifically designed to equip graduates with the requisite skills needed for employment in the high-tech industry.

**Qiong Wu**

Qiong Wu (PhD) is an Assistant Professor in School of Business at Macau University of Science and Technology. She received her PhD from NUI Galway. Her research is in the field of leadership, organizational behavior and project management. She has published at several international conferences and peer reviewed journals. She also serves as reviewers for journals in her area and lead her work by collaborating with researchers worldwide.

**Suzana Sampaio**

Suzana Sampaio (PhD) has extensive experience in the systems, products, and software development industry (20+ years) with strong expertise as a consultant (10+ years) in process improvement, agile methodologies, and project management helping 50+ companies to achieve their business goals. Suzana has worked as a researcher and lecturer at the Computing Department at Federal Rural University of Pernambuco in Brazil (UFRPE) since 2013, where she focuses on projects that allows to build a bridge between academia and industry. Her research focuses on agile methods, project, and adaptive management.