



Walden University
ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies
Collection

2018

Effective Strategies for Building Trust in Virtual Teams

Alphonse Shefa Kwaye
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Business Administration, Management, and Operations Commons](#), and the [Management Sciences and Quantitative Methods Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Management and Technology

This is to certify that the doctoral study by

Alphonse Kwaye

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Robert Miller, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Olivia Herriford, Committee Member, Doctor of Business Administration Faculty

Dr. Matthew Knight, University Reviewer, Doctor of Business Administration Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2018

Abstract

Effective Strategies for Building Trust in Virtual Teams

by

Alphonse Shefa Kwaye

MS, Northeastern University, 2014

LLM, Central European University, 2009

Postgraduate Diploma, University of Yaoundé II, 2005

LLB, University of Buea, 2004

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

August 2018

Abstract

Virtual teams often fail to achieve their objectives because virtual team leaders lack strategies for nurturing trust among dispersed team members. The purpose of this single case study was to explore strategies virtual team leaders in large corporate banks use to build trust among virtual team members. The population of this study included 6 virtual team leaders from a large corporate bank located in the northeast region of the United States. The interpersonal trust theory was the conceptual framework of this study. Data were collected via semistructured telephone interviews and review of company documents. The data analysis process included content analysis and thematic analysis for theme identification. Data analysis revealed four themes related to strategies that leaders of virtual teams can use to build trust among team members: reliable technology, effective communication, teamwork and participation, and respect for people and culture. A fifth theme emerged related to barriers to trust strategies. The implications for positive social change include the potential to improve work environments for virtual team members isolated because of the absence of a social context.

Effective Strategies for Building Trust in Virtual Teams

by

Alphonse Shefa Kwaye

MS, Northeastern University, 2014

LLM, Central European University, 2009

Postgraduate Diploma, University of Yaoundé II, 2005

LLB, University of Buea, 2004

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

August 2018

Dedication

I dedicate this study to my family, particularly my late father and two brothers, mother, sisters, brothers, and lovely wife and daughters. I appreciate all the love, care, encouragement, support, and understanding you demonstrated throughout this journey. This achievement would not have been possible without you.

Acknowledgments

Special thanks and appreciation to my chair, Dr. Robert Miller, for his excellent guidance and direction throughout the doctoral process. I could not have achieved this significant milestone without your assistance. I wish to also thank my committee members, Dr. Olivia Herriford and Dr. Matthew Knight. All the feedback you provided improved my study and knowledge immensely. Thank you to all my friends for their encouragement and support. Most importantly, I thank the Almighty God for observing me through this journey. This accomplishment is by his special grace.

Table of Contents

List of Tables	iv
List of Figures	v
Section 1: Foundation of the Study.....	1
Background of the Problem	1
Problem Statement	3
Purpose Statement.....	3
Nature of the Study	4
Research Question	5
Interview Questions	5
Conceptual Framework.....	6
Operational Definitions.....	7
Assumptions, Limitations, and Delimitations.....	8
Assumptions.....	8
Limitations	9
Delimitations.....	10
Significance of the Study	10
Contribution to Business Practice	10
Implications for Social Change.....	11
A Review of the Professional and Academic Literature.....	11
Virtual Teams.....	16
Interpersonal Trust	34

Transition	55
Section 2: The Project.....	57
Purpose Statement.....	57
Role of the Researcher	57
Participants.....	60
Research Method and Design	63
Research Method	63
Research Design.....	64
Population and Sampling	66
Ethical Research.....	70
Data Collection Instruments	72
Data Collection Technique	75
Data Organization Technique	79
Data Analysis	81
Reliability and Validity.....	83
Dependability	84
Credibility	86
Transferability.....	87
Conformability.....	88
Data Saturation.....	88
Transition and Summary.....	89
Section 3: Application to Professional Practice and Implications for Change	91

Introduction.....	91
Presentation of the Findings.....	91
Theme 1: Reliable Technology.....	92
Theme 2: Effective Communication.....	95
Theme 3: Promote Teamwork and Participation	100
Theme 4: Respect for People and Culture	103
Theme 5: Barriers to Trust Strategies	107
Relating Findings to Conceptual Framework and Literature.....	110
Applications to Professional Practice	115
Implications for Social Change.....	117
Recommendations for Action	118
Recommendations for Further Research.....	119
Reflections	121
Conclusion	122
References.....	124
Appendix A: Interview Protocol.....	173
Appendix B: Invitation Letter (Email).....	176

List of Tables

Table 1. Summation of Literature Review Sources	14
---	----

List of Figures

Figure 1. Literature review organization	15
--	----

Section 1: Foundation of the Study

Virtual teams comprise members residing in and working from various geographical locations, and the management of their activities is primarily accomplished using information and communication technologies (Hosseini, Chileshe, Zuo, & Baroudi, 2015). In a survey of virtual teams, Paul, Drake, and Liang (2016) discovered that 66% of multinational organizations use virtual teams in some fashion. Organizations conducting business in multiple geographical locations are more likely to use virtual teams than are those with business operations within a specific location (Germain & McGuire, 2014). The expansion of organizations in different geographical areas, as well as the limited resources these organizations possess to satisfy traditional or collocated team demands, are the main reasons for the proliferation of virtual teams in the 21st century (Germain & McGuire, 2014). The absence of face-to-face interactions with virtual teams is a major barrier for building trust among team members. Because virtual teams are thriving, Haines (2014) argued, team leaders require solutions for surmounting the challenges virtual teams encounter. Therefore, the purpose of this study was to explore effective strategies virtual team leaders use to build trust among virtual team members.

Background of the Problem

With the help of globalization, many organizations conduct business in different geographical locations (Barnwell, Nedrick, Rudolph, Sesay, & Wellen, 2014). These organizations use virtual teams as a strategy to conduct business activities, including the implementation of information technology projects (Morgan, Paucar-Caceres, & Wright, 2014). Unlike collocated teams, virtual teams afford organizations diverse benefits

(Mocanu, 2014). Some of these benefits include employee travel and accommodations cost savings (Mocanu, 2014), ability to obtain the most qualified talents from anywhere in the world, an increased possibility of employees working around the clock, and increased productivity (Barnwell et al., 2014). The prevalence of virtual teams across multiple business areas is not a surprise because of the benefits they afford organizations.

Despite the widespread use of virtual teams and their benefits to organizations, virtual teams are fraught with a plethora of challenges, including space and time separation, language barriers, cultural differences, and varied leadership cultures (Barnwell et al., 2014). The dispersed geographic location of virtual team members, differences in cultures, as well as the absence of continuous face-to-face interactions, aggravate the challenges in virtual teams (Collins, Chou, Warner, & Rowley, 2017; Han & Beyerlein, 2016). Building trust within virtual teams is a salient challenge team leaders encounter because of the lack of a social context (Fan, Chen, Wang, & Chen, 2014), and a reliance on information and communication technology for interactions since team members rarely meet face to face (Killingsworth, Xue, & Liu, 2016).

Vohra, Rathi, and Bhatnagar (2015) concluded that leaders could foster team effectiveness by enhancing trust among team members. Building a high level of trust within virtual teams is one way project managers can successfully lead virtual teams (Barnwell et al., 2014). Trust helps team members to resolve conflicts in the stages of team development (Pelegrini, Catherine, & Burns, 2014). Trust is the key factor binding team leaders and team members together for increased performance and productivity (Hakanen & Häkkinen, 2015; Nienaber, Romeike, Searle, & Schewe, 2015; Nirwan,

2014). The time and space separation between virtual team members makes it difficult to build trust in virtual team settings. With limited literature on virtual teams and trust in banks, exploring effective strategies for building trust among virtual team members was not only important but necessary for the success and effectiveness of large corporate banks using virtual teams to conduct business.

Problem Statement

Members of virtual teams lack a shared social context because of time and space separation, which hampers team members' ability to build trust in each other (Fan et al., 2014). In a survey of virtual teams, 62.5% of team members reported feeling isolated because they have never met each other face to face (El-Sofany, Alwadani, & Alwadani, 2014). The general business problem is that some leaders experience difficulty building trust within virtual teams, resulting in a decline in team performance, reduced productivity, and reduced profitability for their organizations. The specific business problem is that some virtual team leaders in large corporate banks lack strategies to build trust among virtual team members.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies virtual team leaders in large corporate banks use to build trust among virtual team members. The target population for this study included six virtual team leaders with successful experience building trust among virtual team members at a large corporate bank headquartered in the northeast region of the United States. The implications for positive social change included the potential for providing team leaders with effective

strategies for building trusting relationships within virtual teams. By improving the work environment, employers can promote the overall mental and physical health and wellbeing of employees beyond the workplace (Wyatt, Brand, Ashby-Pepper, Abraham, & Fleming, 2015).

Nature of the Study

The qualitative research method was appropriate for this study. Researchers employ the qualitative research method to comprehend and explore descriptive accounts of, and similarities and differences between, various social events (Park & Park, 2016). Therefore, for this study, which was to explore strategies virtual team leaders use to build trust among members of virtual teams, the qualitative method was appropriate. Researchers employ the quantitative research method to identify relationships, like correlation and causation between variables (Mayer, 2015; Park & Park, 2016). The quantitative method was not appropriate for this study because I did not examine relationships, like correlation and causation between variables. Finally, mixed-method research is appropriate when the researcher chooses to combine the quantitative and qualitative research methods (Johnson, 2015). Mixed-method research was not appropriate for this study because this study did not have a quantitative component.

The case study design was appropriate for this study. Researchers use case study design when they want to gain deep insights into a complex contemporary phenomenon by using multiple data sources and collection techniques (Tumele, 2015). The case study design was appropriate for this study because it involves the exploration of strategies team leaders use to build trust among virtual team members. Researchers use the

phenomenological design to understand the meanings of people's lived experience with a phenomenon (VanScoy & Evenstad, 2015). The phenomenological design was not appropriate for this study because I did not plan to explore lived experiences. Researchers select ethnographic design when they want to explore culture in a real-life setting (Van Maanen, 2015). Because exploring culture in real-life situations was not part of the study, the ethnographic design was not appropriate.

Research Question

The overarching research question for this study was the following: What strategies do virtual team leaders in large corporate banks use to build trust among virtual team members?

Interview Questions

1. What strategies have you used to build trust among members of virtual teams?
2. What barriers did you encounter in implementing the strategies for building trust among members of virtual teams?
3. How did you address the barriers in implementing strategies for building trust among members of virtual teams?
4. What strategies were most effective in building trust among virtual team members?
5. What strategies were least effective in building trust among virtual team members?
6. How do your team members communicate and interact with each other and how does this affect trust formation within the virtual team?

7. How do cultural differences, technology, knowledge sharing, time difference, and geographical location affect trust in virtual teams?
8. What other information would you like to share regarding strategies virtual team leaders in large corporate banks use to build trust among virtual team members?

Conceptual Framework

The conceptual framework for this qualitative single case study is the interpersonal trust theory. McAllister (1995) developed the theory to understand the nature of interpersonal trust relationships in the workplace, factors affecting the building of trust, and the consequences of trust on behavior and performance. Interpersonal trust is the extent to which a person is confident and willing to act based on the words, actions, and decisions of another (McAllister, 1995). The key constructs underlying the theory include cognition-based trust and affect-based trust. The basis of interpersonal trust in the early stage of a team is cognition trust, whereas affective trust forms the basis of interpersonal trust in the later stage of the team when team members interact with each other (McAllister, 1995). The theory holds that managers can use cognition-based trust and affect-based trust to build trusting relationships with employees (McAllister, 1995). Managers build cognition-based trust on competence, benevolence, and integrity (Wang, Qiu, Kim, & Benbasat, 2016), as well as reliability and dependency (McAllister, 1995). Managers build affect-based trust on confidence, emotion, and reciprocity (Wang et al., 2016). The interpersonal trust theory aligned with the purpose of this study, which was to explore strategies virtual team leaders use to build trust among virtual team members.

Operational Definitions

Collocated teams: Collocated teams are traditional forms of teams wherein members meet face to face in the same location or office and work together to accomplish common goals (Ebrahim, 2015).

Distributed teams: Distributed teams, also called dispersed teams, are team wherein members live in different time zones and geographical locations but connect with one another through information and communication technologies (Fan et al., 2014).

E-interviews: E-interviews are interviews conducted with research participants using electronic tools such as Skype (Deakin & Wakefield, 2014).

E-leadership: E-leadership, also referred to as virtual leadership, involves influencing virtual team members via the use of technology (Qteishat, 2014).

Global virtual teams: Global virtual teams are teams in which members work from different geographical locations and manage their work and activities primarily via the use of information and communication technologies (Hosseini et al., 2015).

Interpersonal trust: Interpersonal trust is a type of trust existing among people in organizations (Guinot, Chiva, & Roca-Puig, 2014).

Partially distributed teams: In partially distributed teams, team members interact using information and communication technologies as well as face-to-face meetings (Eubanks, Palanski, Olabisi, Joinson, & Dove, 2016).

Telecommuting: Telecommuting or teleworking relates to virtual team members' ability to work completely from home or within their workplace but interact with other

team members solely using information technologies (Coenen & Kok, 2014; Ebrahim, 2015).

Trustors: Trustors are people who invest their trust in others believing the latter will reciprocate by acting or behaving in a specific way (Bonnefon, Hopfensitz, & De Neys, 2017).

Virtuality: Virtuality is the extent to which teams work virtually through information and communication technologies as opposed to working in the same location (Hoch & Kozlowski, 2014; Hosseini et al., 2015).

Assumptions, Limitations, and Delimitations

Assumptions, limitations, and delimitations are three important research concepts helpful to readers in understanding decisions researchers made, aspects researchers considered, and the scope of a study. Discussing these concepts provides context regarding the overall research study. Assumptions, limitations, and delimitations can limit research processes and the confines of research studies.

Assumptions

Assumptions are aspects of research studies including research methods, designs, participants, data collection instruments, and data analysis techniques that researchers believe are accurate or true without proof (Valentin, 2014). Researchers have minimal control over assumptions (Lips-Wiersma & Mills, 2014). This study had various assumptions. First, having worked as part of virtual teams for more than 4 years made me believe I could collect relevant data for the study. Second, virtual team leaders with at least 1 year of trust-building experience within virtual teams had the requisite experience

and knowledge to inform this study. Third, research participants would accept taking part in Skype interviews to allow observation of facial expressions and nonverbal cues.

Fourth, participants would answer interview questions honestly and factually, without adding their individual opinions. These assumptions influenced research processes and results. All assumptions held true except for the one about Skype interviews. Participants preferred telephone interviews.

Limitations

Limitations consist of aspects or factors restricting the study (Marshall & Rossman, 2016). Limitations are also potential shortcomings of a research study (Kahlke, 2014). This study involved interviewing six research participants from a single organization in the northeast region of the United States. Although participants work virtually, a sample of six people in one organization was not representative of the United States. Conducting this study within an abbreviated period was another limitation. The researcher's previous knowledge or experience with the topic under study increases the likelihood of researcher bias (Yin, 2017). My experience as a virtual team member for more than 4 years did not lead to bias because I relied solely on open-ended interview questions during data collection and on participant responses during data analysis. Additionally, participants' unwillingness to participate in Skype interviews limited my ability to observe facial expressions. My minimal experience conducting telephone and Skype interviews was a limitation to the study. Focusing on virtual team leaders only without including virtual team members within the study was a limitation because the process of building trust within virtual teams affects team members as well.

Delimitations

Delimitations are the frontiers or borderlines of a research study (Bloomberg & Volpe, 2016). The scope of this study included exploring strategies virtual team leaders in large corporate banks use to build trust among virtual team members. The study's sample size was six virtual team leaders with successful trust-building experience among virtual team members at a large corporate bank headquartered in the northeast region of the United States. Participants in this study were virtual team leaders working for a large corporate bank, with at least 1 year of work experience in the target organization, and at least a year of successful trust-building experience in virtual teams. The focus of this study was on leaders of virtual teams in which team members liaise with each other using information and communication technologies. Data collection of the study was through telephone interviews and review of company documents only. By restricting the scope of this study in terms of sample size, organization type, and geographical location, delimitations influenced research findings.

Significance of the Study**Contribution to Business Practice**

Using the results of this study, organizational leaders could better understand and apply strategies for developing interpersonal trust in virtual teams. Considering the challenges virtual teams encounter in working as a cohesive unit (Lilian, 2014), the findings of this study could provide virtual team leaders with strategies to build trust among team members and, consequently, improve the performance of virtual teams. As Mach and Lvina (2016) discovered, when team members trust their leader, overall trust

within the team improves, as does team performance. Ultimately, the findings of this qualitative study have the potential to help provide virtual team leaders with strategies for improving virtual teams' overall successful performance.

Implications for Social Change

The implications for positive social change include the potential for providing team leaders with effective strategies for building trusting relationships within virtual teams. With these strategies, team leaders can increase social presence in virtual teams, which according to Kohonen-Aho and Alin (2015), is more difficult to achieve in virtual teams than in collocated teams. By increasing social presence, team leaders can potentially create improved work environments for dispersed virtual team members who, as El-Sofany et al. (2014) concluded, usually feel isolated. Finally, by improving the work environment, employers can promote the overall mental and physical health and wellbeing of employees beyond the workplace (Wyatt et al., 2015).

A Review of the Professional and Academic Literature

The way in which organizations conduct business has changed because of the creation of virtual teams (Purvanova, 2014). Team members accustomed to working in the same location and meeting face to face now work from various locations and meet with the assistance of information and communication technologies (Chang, Hung, & Hsieh, 2014). As organizations shift from traditional to virtual teams, virtual team leaders encounter new benefits and challenges. A key benefit of virtual teams to organizations includes cost savings in employee travels and accommodation or workspace (Mocanu, 2014). Managers of virtual teams have the challenge of managing team members living in

various geographic locations and time zones, and addressing diverse languages, cultures, and leadership styles (Barnwell et al., 2014; Collins et al., 2017; Han & Beyerlein, 2016).

Trust is important for both virtual and colocated teams because team members need to trust each other to collaborate, communicate, share information, and perform (Boies, Fiset, & Gill, 2015; Lusher, Kremer, & Robins, 2014; Wu, Chuang, & Hsu, 2014). Though trust is crucial, developing it in cross-functional project team is a challenge (Buvik & Rolfsen, 2015). With virtual teams where team members live and work from various locations, the challenge for building trust is even greater (De Paoli & Ropo, 2015). The difficulty in building trust in virtual teams is the lack of a social context in this type of teams (Fan et al., 2014). The absence of trust among virtual team members negatively influences team performance (Derven, 2016). Given the importance of trust in virtual teams, understanding effective strategies leaders need to build trust among virtual team members is necessary for virtual teams' success, performance, and effectiveness (Morita & Burns, 2014).

For this literature review, I explored scholarly articles on virtual teams and interpersonal trust. I searched for peer-reviewed scholarly resources in the following databases: Academic Search Complete, Business Sources Complete, Emerald Management Journals, ABI/INFORM Complete, Google Scholar, Science Direct, SAGE Premier, Thoreau, ProQuest Central, Dissertation and Theses at Walden, and ProQuest Dissertations and Theses Full Text. I used the following key terms and phrases to search the literature: *temporary teams*, *temporary distributed teams*, *virtual teams*, *distributed teams*, *global virtual teams*, *dispersed teams*, *geographically distributed teams*, *virtual*

teams communication, technology and virtual teams, trust in virtual teams, constructs of trust, factors affecting trust in virtual teams, trust building strategies in virtual teams, leadership and trust in virtual teams, social presence in virtual teams, social presence and virtual team trust, interpersonal trust, interpersonal trust and virtual teams, cognition-based trust, affect-based trust, cognitive trust, affective trust, cognition-based trust and virtual teams, affect-based trust and virtual teams, cognitive trust and virtual teams, affective trust and virtual teams, virtual teams challenges, virtual team effectiveness, factors affecting virtual teams, virtual team cohesion and trust, cultural difference and virtual team trust, virtual teams in banks, virtual teams and trust in banks, trust and knowledge sharing in virtual teams, banks and virtual teams, benefits of virtual teams, advantages of virtual teams, disadvantages of virtual teams, uses of virtual teams, history of virtual teams, performance in virtual teams, and types of virtual teams.

In comparison with traditional teams, virtual teams are new to most organizations, and the literature on effective strategies for building trust among virtual team members is scarce. Table 1 reveals a summary of all the articles I used in this literature review. Since literature review is the foundation of research studies and helps with analysis of research outcomes (Ribeiro Serra, 2015), I included and excluded peer-reviewed resources based on their relevance to the objective of this study: the effective strategies virtual team leaders use to build trust among virtual team members. Based on the searches conducted, I screened literature for further reading by first scanning the abstracts of articles. Since some abstracts are not all encompassing, I scanned through articles even if their abstracts did not have any information related to my topic.

Table 1

Summation of Literature Review Sources

Reference type	Total	Within 5 years	Beyond 5 years
Research-based peer-reviewed journals	179	166 (93%)	13 (7%)
Non-peer reviewed journals	2	1	1

The total number of sources used for the entire study was 344. Of this number, 342 were peer-reviewed articles representing 99%. References published within the last 5 years were 329, which is 96% of the total number. I organized the literature review for this study into the following sections and subsections. The two main sections of the review include virtual teams and interpersonal trust. All main sections included subsections. The subsections of virtual teams include the history of virtual teams, benefits and advantages of virtual teams, challenges and drawbacks of virtual teams, and virtual teams and banks. The subsections of interpersonal trust include interpersonal trust theory, interpersonal trust constructs, swift trust theory, and trust in virtual teams. Figure 1 depicts the organization of the literature review.

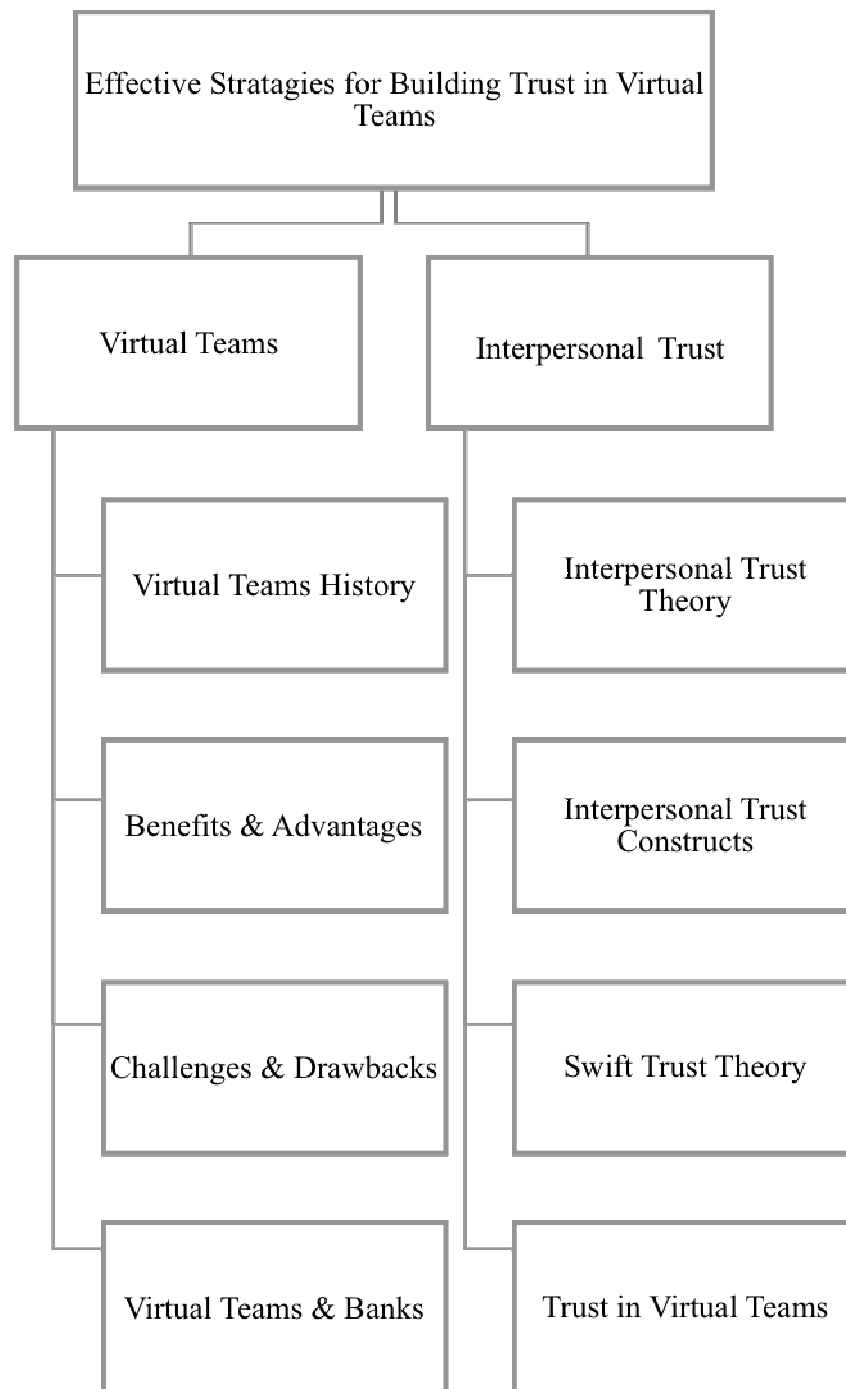


Figure 1. Literature review organization.

The purpose of this qualitative single case study was to explore the strategies virtual team leaders in large corporate banks use to build trust among virtual team members. In the ensuing pages, I expand on the main sections and subsections of the literature I reviewed. The focus of the first section of this literature review is on the aspects of virtual teams, whereas the focus of the second section is on interpersonal trust and its importance in virtual teams.

Virtual Teams

Virtual teams exist because of advances in information and communication technologies (Killingsworth et al., 2016). The direct consequence of the advent of virtual teams is a change in the way team members communicate and interact: from traditional face-to-face interactions to interactions via information and communication technologies (Chang et al., 2014) such as teleconferencing, video conferencing, audio conferencing, emails, instant messaging, and file and application sharing (Pangil & Moi Chan, 2014; Wadsworth & Blanchard, 2015). Virtual teams have different arrangements. One example includes teams wherein team members are teleworkers. In this setup, virtual team members can work completely from home or within their workplace and interact solely via the use of information technologies (Ebrahim, 2015). The other setup of virtual teams is partially distributed teams, wherein team members interact through information and communication technologies as well as face-to-face meetings (Eubanks et al., 2016). Partially distributed teams are a hybrid of collocated and virtual teams. Some team members work from their homes while others collocate in an office (Eubanks et al.,

2016). In addition, organizations may set up virtual teams to solve specific problems or for team members to work together on a regular basis (Eubanks et al., 2016).

Different definitions of virtual teams exist in the literature. This variety of definitions is because of the many alternative names researchers ascribe to virtual teams such as global virtual teams, distributed teams, geographically dispersed teams, and culturally diverse teams, making it difficult to have a single and generally accepted definition (Chatfield, Shlemoon, Redublado, & Darbyshire, 2014). Virtual teams are groups of people working together through information and communication technologies across time, space, and organizational boundaries to achieve a goal or an objective they share (Pangil & Moi Chan, 2014). Alternatively, global virtual teams are teams whose members work from various geographical locations and manage their work and activities primarily via the use of information and communication technologies (Hosseini et al., 2015). Chang et al. (2014) also defined virtual teams as a group of individuals with diverse cultural backgrounds working from various geographical locations and collaborating using information and communication technologies. Another definition of virtual teams includes distributed teams wherein team members live in different time zones and geographical locations but are connected to one another through information and communication technologies (Fan et al., 2014). Finally, virtual teams comprise a group of people in various geographical locations working as a team and dependent on each other to achieve a common objective. Some common characteristics of virtual teams discovered across these definitions are technology, time differences, cultural diversity, and the distance between team members.

Virtual teams, since their inception, have become widespread as many organizations in different industries take advantage of this new way of constituting work teams. The use of virtual teams is now standard practice for companies implementing projects and new initiatives (Fan et al., 2014; LaBrosse, 2008). This widespread use of virtual teams is because of the many benefits and advantages they afford organizations. Through virtual teams, organizations have access to the best talents irrespective of their location in the world and provide a flexible work environment for team members (Paul et al., 2016). Despite these benefits, the nature of virtual teams, wherein team members live and work from dispersed geographic locations, presents serious leadership challenges, such as cultural differences and conflicts between team members, for virtual team leaders (Chang et al., 2014).

One key factor for virtual teams' success and effectiveness is trust (Chang et al., 2014; Paul et al., 2016). Trust has a positive influence on collaboration, knowledge sharing, communication, and cooperation among virtual team members (Chen, Lin, & Yen, 2014; Derven, 2016; Killingsworth et al., 2016) as well as overall virtual team performance (Chang et al., 2014). However, building trust among virtual team members remains a challenge for virtual team leaders because of time and space separation between team members and the dearth of face-to-face interactions. The challenge that team members encounter in recognizing other team members' abilities, benevolence, and integrity, which are important trust-forming attributes, aggravates the difficulty in building trust in virtual teams (Paul et al., 2016). Consequently, the need for trust in virtual teams, as well as the difficulty in establishing trust among virtual team members,

highlights the importance of having strategies for building trust within virtual teams.

Given these challenges inherent in virtual teams, leaders must improve their skills if they want their teams to be successful. Organizations seeking to thrive in this new fashion of conducting business transactions or projects must institute strategies, such as the provision of training to virtual team leaders (Robinson, 2016), as well as skills for building trust to create effective virtual teams.

History of virtual teams. Virtual teams are a group of coworkers from various departments or business units in organizations using advanced information and communication technology to interact and attain a common objective (Pangil & Moi Chan, 2014). In their original or primitive form, virtual teams date back thousands of years. The Chinese and Native Americans communicated and interacted with each other via the use of coded smoke signals from long distances (White, 2014). The literature on virtual teams goes as far back as the initial evolution of quality circles in Japan in the 1960s, where a group of workers with similar work-related problems constantly met face to face to resolve them, an approach to problem-solving that gained significant grounds in the auto industry around the 1970s and 1980s (Ebrahim, Ahmed, & Taha, 2009; White, 2014).

Virtual teams have their origin in work teams (White, 2014). Virtual teams first became involved with technology in 1984 at a workshop where people from different social classes met to understand how technology could best serve their needs (White, 2014). The outcome of the workshop was a computer-assisted group or team called computer-supported cooperative work (White, 2014). Towards the late 1980s and start of

the 1990s, myriad companies instituted self-managing work teams (Ebrahim et al., 2009) and many employees started working from their homes with the help of advanced information and communication technologies such as telephones, conference calls, and fax machines (Douglas, Lubbe, & Fabris-Rotelli, 2013). Around the mid-1990s, many companies, including Goodyear, Motorola, Texas Instruments, and General Electric, started exporting the team concept to their partners, subsidiaries, and branches in other continents such as Latin America, Europe, and Asia to merge their human resource practices globally (Ebrahim et al., 2009).

According to Lipnack and Stamps (1999), the latest form of teams in the 21st century or information era includes virtual teams. Before this era, the nomadic, agricultural, and industrial eras existed. The flexibility virtual teams afford organizations in this information era stems from small groups, hierarchy, and bureaucracy in the nomadic era, agricultural era, and industrial era respectively (Lipnack & Stamps, 1999). Virtual teams or self-managing teams surfaced to reduce bureaucracy, abate cycle times, and improve services (Ebrahim et al., 2009). Other benefits expected from virtual teams include cost savings from reduced employee travels, flexible work schedules, and access for companies to cheaper resources and technical expertise all over the globe (Ebrahim, 2015). Virtual teams, in their current form, emerged from technological advancements (Lipnack & Stamps, 1999). The organizational structure of teams dates back to the 1970s (Kimble, 2011). During that era, members of teams worked in the same location (Ebrahim, 2015). The nature of teams has changed, with team members working from various geographical locations and collaborating on projects with organizations across

multiple industries because of information technology as well as fast and reliable communications networks (Benetytė & Jatuliavičienė, 2014; Kimble, 2011). Team members need not be present in the same location all the time.

Organizations increased their use of virtual teams as information and communication technology advanced to achieve organizational leaders' desire to diversify and enter other markets (Zivick, 2012). By 2008, about 102,900 of the United States federal government's employees were working virtually (Green & Roberts, 2010). Sixty-six percent of multinational organizations utilize virtual teams one way or another (Paul et al., 2016). Organizations are continuing to invest in virtual teams to increase performance and be more competitive (Ebrahim et al., 2009). Virtual teams allow companies to acquire the best talents in the world, regardless of their time zone or geographical location, thereby enhancing organizations' competitiveness in the market by decreasing the time-to-market and providing quick and low-cost solutions (Ebrahim et al., 2009).

Organizations use virtual teams for multiple purposes such as scientific research, new product launch, organizational process solutions, new application development, and innovation (Derven, 2016; White, 2014). Other uses of virtual teams include resolution of global problems, customer support, and the resolution of architecture, engineering and construction challenges (Hosseini et al., 2015; Killingsworth et al., 2016; Paul et al., 2016). Organizations also use virtual teams when indispensable employees are reluctant to relocate to a new work site as well as to enhance innovation and growth (Colfax, Santos, & Diego, 2009; Derven, 2016). The above benefits of virtual teams could be the

reasons why many organizations in different industries use virtual teams for multiple purposes.

Benefits and advantages. After providing a historical overview of virtual teams, the next step is to discuss the benefits and advantages of virtual teams. One important benefit virtual teams afford organizations is flexibility (Drescher & Garbers, 2016; Pathak, 2015). Flexibility may include providing telecommuting opportunities to employees as well as creating flexible work schedules or accommodations for them (Coenen & Kok, 2014; Perlow & Kelly, 2014). Virtual teams have a substantial amount of flexibility because team members can complete assigned tasks or activities independently and according to their schedules (Gilson, Maynard, Young, Vartiainen, & Hakonen, 2015). Coenen and Kok (2014) concluded telecommuting or telework and flexible work schedules positively influence new product development, which is one of the focus areas of virtual teams. Virtual teams are flexible and versatile because they can adjust to quickly respond to new tasks and rapid changes (Gilson et al., 2015). In addition, virtual teams include experts with flexible work time, space, and travel, making such teams desirable to multinational organizations (Drescher & Garbers, 2016).

Unlike collocated teams, a key benefit unique to virtual teams includes their ability to bring together a team of people with specialized skills across time zones and geographical boundaries, increasing organizations' staffing flexibility to satisfy market demands (Hoch & Kozlowski, 2014). In addition to heightened flexibility, other obvious merits of virtual teams include decreased travel time and expense leading to cost savings for organizations (Ebrahim, 2015; Hoch & Kozlowski, 2014), having access to the best

talents irrespective of their location, and the ability of resources to work 24 hours per day (Hoch & Kozlowski, 2014). Virtual teams are appealing to most employees nowadays because they desire flexible work schedules (Pangil & Moi Chan, 2014; Perlow & Kelly, 2014). Any organization adopting or implementing virtual teams may become an employer of choice.

Having virtual teams in organizations helps increase knowledge, broaden skills, and add the value of experience because team members hail from various geographical locations and possess diverse cultural backgrounds, thereby providing an opportunity or environment for team members to learn and share their experiences (Keefe, Lang, Rumsey, & True, 2016). The richness of learning, diverse experiences, and knowledge sharing virtual teams provide can help create a competitive edge for many companies (Keefe et al., 2016). The diverse experiences and knowledge sharing in virtual teams also help team members to gain an in-depth understanding of, and an informed perspective on project tasks (Han & Beyerlein, 2016), and proffer effective solutions to problems (Olaisen & Revang, 2017).

The geographical dispersion of virtual team members makes it easier to constitute virtual teams within multinational organizations since it allows managers to seek resources in other parts of the world when scarcity of workers exists in their geographical area (Pathak, 2015). This existence of a global pool of resources beyond national boundaries means highly sought experts needed in organizations are available through virtual teams 24 hours a day, taking into consideration the difference in time zones (Magnusson, Schuster, & Taras, 2014). Virtual team members' ability to work

throughout the day and night enhances the productivity of organizations because while some team members are asleep, other team members in different time zones continue to work (Keefe et al., 2016). The ultimate outcome of this continuous work in virtual teams include a reduced development time, a quicker time to market, a faster generation of new products, decrease in the risk of chasing new opportunities, and a decrease in cycle times (Chang et al., 2014; Keefe et al., 2016).

Finally, virtual teams enable employees to share knowledge virtually and reduce travel by 50 to 70% resulting in less pollution, diminished stress, and increased output (Olaisen & Revang, 2017). These benefits align with most organizations' objective to cut costs and minimize challenges involved in collocating team members (Pangil & Moi Chan, 2014). Virtual teams also help organizations to gain an understanding of global business and solutions, achieve economies of scale, and take advantage of work cycles amenable to around the clock productivity, thereby accelerating the introduction of products and innovation (Derven, 2016). Smite, Kuhrmann, and Keil (2014) also argued creating a common objective is easier across locations and virtual teams' networks are more stable. Virtual teams have many advantages and can help organizations to accomplish major projects and initiatives.

Challenges and drawbacks. Despite the advantages and benefits of virtual teams discussed above, multiple disadvantages in implementing such teams also exist. A major challenge for virtual team leaders is the facilitation of virtual team meetings because of differences in time zones. As opposed to face-to-face meetings, virtual team leaders cannot observe the body language of attendees or monitor their activities during meetings

because of space and time separating virtual team members (Fan et al., 2014; Lilian, 2014). A key challenge for virtual team leaders pertains to communicating and interacting across multiple cultures as this requires them to have specific skills such as the ability to build trust and preserve cordial relationships (Fan et al., 2014; Lilian, 2014).

Unlike collocated teams where team members are in one place, the distance between virtual team members makes it difficult for virtual team leaders to build trust. Since the processes of hierarchical leadership used in collocated teams are inadequate for virtual teams (Hoch & Kozlowski, 2014), a major challenge for virtual team leaders is to encourage and inspire virtual team members to communicate actively and continuously with other team members (Lilian, 2014). The failure on the part of virtual team leaders to promote communication will result in decreased or complete absence of trust, cohesion, work satisfaction, cooperative behavior, and commitment to goals within the team and affect overall team performance negatively (Hoch & Kozlowski, 2014).

Another challenge in virtual teams relates to conflicts among virtual team members. Global virtual teams comprise team members with diverse cultural backgrounds, varied levels of education, and work ethics or approach, and while this diversity may be a benefit for virtual teams, it can heighten the likelihood of conflicts (Chang et al., 2014). Other sources of conflicts in virtual teams include language competence, time zones, and variations in technology resources (Keefe et al., 2016) as well as issues related to personality, accountability, and priorities (Derven, 2016). The costs of combining people from diverse cultures in one team included more conflict and decreased social integration (Magnusson et al., 2014). Resolving or preventing these

conflicts is difficult because cultural diversity requires virtual team leaders to have unique skills such as attentive behaviors (Lilian, 2014).

Advanced information and communication technologies, which are essential for the proper functioning of virtual teams, can negatively affect communication (Foster et al., 2015; Smite, Kuhrmann, & Keil, 2014). Virtual team members communicate or interact with the help of different technologies considered as a substitute for face-to-face interactions. The direct consequences of limiting communication in virtual teams to the use of technology include insufficient communication, delays in providing responses, misunderstandings, and the inability of identifying conflicts (Magnusson et al., 2014; Smite et al., 2014). These challenges from information and communication technologies are more severe in global virtual teams wherein differences in cultures and languages hinder and attenuate proper understanding (Derven, 2016; Smite et al., 2014). Unreliable technologies are also a disadvantage for virtual teams because they can affect communication and interactions between team members to complete tasks on time (Pangil & Moi Chan, 2014).

Work coordination is a challenging aspect of virtual teams. Virtual team members' differences in linguistic and cultural beliefs can make it more difficult for them to arrive at sound and unanimously agreed-upon decisions (Paul et al., 2016). In global virtual teams with different nationalities or languages, subgroups can emerge from bias, partiality, and favoritism among team members, leading to a reduction in collaboration, cooperation, and coordination between the subgroups and a hostile team environment with inferior performance (Paul et al., 2016; Yilmaz & Peña, 2014). The opposition

between subgroups within virtual teams could affect the process for quality decision-making as well as decrease the sharing of knowledge and trust (Brewer, Mitchell, Sanders, Wallace, & Wood, 2015; Mach & Baruch, 2015; Yilmaz & Peña, 2014).

Trust is one of the most crucial factors of virtual teams because it inspires team members to share information and enhances virtual teams' success (Chang et al., 2014; Derven, 2016). Despite the importance of trust in virtual teams, building trust among team members remains a major challenge. A key contributing factor to this difficulty in forming trust relates to team members varied cultural and national backgrounds, and the inability of team members to adjust to new cultures (Chang et al., 2014). The absence of a social context in virtual teams can cause misinterpretations and distortions of the intentions of team members, and this could inhibit the development of trust among team members (Fan et al., 2014).

Just like any other team, communication is a vital aspect of virtual teams. However, unlike other forms of teams, minimal face-to-face meetings exist in virtual teams, limiting communication and interactions between team members through information and communication technologies (Keefe et al., 2016). This communication approach is problematic because all important nonverbal cues and facial expressions of in-person interactions are missing (Keefe et al., 2016; Morita & Burns, 2014; Pangil & Moi Chan, 2014). Other aspects aggravating virtual teams' communication challenges include added interaction costs from the slow pace of nonnative speakers of the team's chosen language (Chatfield et al., 2014) as well as language barriers and the incorrect use of, or difficulty in using, communication technologies (Trautrim, Defee, & Farris, 2016).

The difference in virtual team members' time zones can be a source of problems and challenges for the effectiveness of virtual teams because some project tasks require virtual team members to work on them together rather than individually or independently (Keefe, 2016). Moreover, although time zone differences permit team members to work 24 hours a day, this may overwork team members and lead to team burnout (Derven, 2016). The location of virtual team members determines the difference in time zones. Where the difference in time zones is up to one day, it may negatively affect the virtual teams' ability to complete tasks on time (Keefe et al., 2016). The 24-hour workday, because of time zone differences in virtual teams, may lead to new communication and leadership challenges (Derven, 2016).

One aspect organizations require from virtual teams is the sharing of information and knowledge in an effective and efficient manner (Pathak, 2015), but this remains a challenge (Chang et al., 2014). As virtual teams become more global and have team members from different countries and cultures, knowledge sharing becomes even more complex and challenging because organizations must determine how to share information between team members with diverse cultural backgrounds (Killingsworth et al., 2016). Furthermore, when organizations create virtual teams to work on projects, team members may not understand each other if they have not worked together previously. This lack of knowledge can be a challenge to information sharing because virtual team members do not understand the type of knowledge other team members of the virtual team possess (Pathak, 2015).

A final challenge in virtual teams is to address cultural diversity. Culture affects the way people speak, communicate, manage time, lead, and complete tasks or work (Keefe et al., 2014). One or more of these aspects may be the source of differences between virtual team members. Virtual team members' cultural differences can exacerbate the possibility of conflicts in virtual teams (Chang et al., 2014). Linguistic and national cultural diversity lead to task completion and relationship building conflicts (Han & Beyerlein, 2016). The rationale, here, is the difference in cultures of team members negatively affect their ability interact with others. When team members fail to adapt to other cultures and conflicts or problems are unresolved, they resort to blaming other team members (Chang et al., 2014). If this occurs, challenges relating to the coordination of virtual team activities, the establishment of expectations, development of trust, and the ability to learn from other cultures will abound (Han & Beyerlein, 2016).

Virtual teams and banks. The focus of this section is to review virtual teams in the banking sector. Since virtual team members live in different geographical locations with varied time zones, organizations use virtual teams in numerous ways. Some of the ways include meeting the needs of customers quickly while maintaining very high-quality standards, cutting cost from significantly reduced employee travels, and reacting to the fluctuating demands of business (Krumm, Kanthak, Hartmann, & Hertel, G., 2016; Pangil & Moi Chan, 2014; Pinar, Zehir, Kitapçı, & Tanriverdi, 2014). However, the literature about virtual teams in the banking industry is extremely scarce, and this could be because of the conservative nature of banks still utilizing collocated teams to complete tasks making them reluctant to accept new organizational methods or process engineering

techniques such as virtual teams (Kage, 2012). Given the benefits of virtual teams, banks could provide services that more efficient to their customers if they invest in such teams.

Banks require collaborative and interactive teamwork between employees for the successful completion of transactions (Doeland, 2017; Lakkoju, 2014), meaning banks could benefit from taking advantage of virtual teams. Some of the benefits banks obtain from using virtual teams include their ability to enter into new markets, reduce cost, and build relationships with employees living in other locations (Etim & Huynh, 2015; Tetteh & Okantey, 2016). Virtual teams help organizations to reduce cost or save cost (Ebert, Kuhrmann, & Prikladnicki, 2016; Lindeblad, Voytenko, Mont, & Arnfalk, 2016) because Kage (2012) argued setting up virtual team members' workstation and running them is cheaper than maintaining physical offices.

Virtual teams, in the banking industry, consist of a collection of experts working from various geographical locations and liaising through the help of information and communication technologies to complete interdependent tasks, permitting organizations to respond quickly to heightened competition and at the same time providing greater flexibility to virtual team members (Ebert et al., 2016; Kage, 2012). In addition to using virtual teams to enter new markets, banks use virtual teams to be more competitive and innovative, to develop new products, support customers, and manage business processes (Etim & Huynh, 2015).

Research exists on factors affecting virtual team performance in the banking industry. One important argument is the empowerment of virtual team members enhances team performance (Gibson, Huang, Kirkman, & Shapiro, 2014), but interpersonal trust is

necessary for empowering team members (David Schoorman, Mayer, & Davis, 2016). Since face-to-face meetings and interactions are costly and hence scarce, empowering virtual team members to make urgent decisions and using virtual team meetings improve performance, knowledge sharing, and the affective reactions of members (Jiang, Flores, Leelawong, & Manz, 2016; Kirkman, Shapiro, Lu, & McGurrin, 2016; Kukenberger, Mathieu, & Ruddy, 2015). Professional or social interaction among virtual team members in the banking industry positively impacts virtual teams' performance, and social interaction includes the following aspect: close relationships, interpersonal trust, the frequency of communication, as well as the time virtual team members spend on interactions (Olaisen & Revang, 2017). The rationale is by building trust and fostering communication among virtual team members, virtual teams become cohesive and can accomplish team objectives (Paul et al., 2016). In addition, because virtual team members live in various geographical locations, virtual teams need a social context for team members to liaise with each other, build relationships, and share knowledge or information necessary for virtual team performance (Gao, Guo, Chen, & Li, 2016).

Although interpersonal trust and communication frequency are important factors for virtual teams' effectiveness in the banking industry (Kage, 2012; Söderberg & Bjørn, 2013), building trust and ensuring effective communication exists remains a challenge for virtual team leaders (Benetytė & Jatuliavičienė, 2014; Peñarroja, Orengo, Zornoza, Sánchez, & Ripoll, 2015; Saafein, & Shaykhian, 2014). Leading employees dispersed in various geographical locations is another challenge for managers in the banking industry (Qteishat, 2014). The solution for this challenge is non-traditional forms of leadership

such as e-leadership, emergent leadership, and shared leadership (Avolio, Sosik, Kahai, & Baker, 2014; Charlier, Stewart, Greco, & Reeves, 2016; Hoegl & Muethel, 2016). E-leadership involves influencing virtual team members via the use of technology (Qteishat, 2014), emergent leadership involves the emergence of leaders from within virtual teams (Ziek & Smulowitz, 2014), and shared leadership entails sharing leadership responsibilities with team members (Drescher & Garbers, 2016). These non-traditional leadership types are effective alternatives to traditional leadership styles because they afford flexibility. Concerning traditional teams' leadership styles, Graham, Daniel, and Doore (2015) concluded those forms of leadership are not effective for virtual teams composed of millennials. Similarly, Schmidt (2014) argued transformational leadership style and other forms traditional leadership do not impact virtual teams' effectiveness as much as they impact collocated teams because of the virtuality aspect of dispersed teams, which requires more communication and interaction between members. Since virtual teams encounter greater communication, socialization, and conflict management challenges than collocated teams in the initial stages of team formation, virtual team leaders must possess unique and effective leadership skills (Schmidt, 2014). Therefore, banks can rely on any of the unconventional forms of leadership to effectively manage virtual teams.

An important aspect discovered in the literature of virtual teams and banks include the pre-requisites for creating an effective virtual team within banks. The four factors that are pre-requisites for effective virtual teams in the banking industry include technology, suitable employees for virtual work, data security, and a system to measure

performance (Kage, 2012). The measurement of virtual teams' performance and effectiveness, unlike technology and data security, is vital for banks and is one of the prerequisites for implementing virtual teams' processes (Kage, 2012; Pinar et al., 2014). Organizational leaders should consider virtual team effectiveness, identify people interested in virtual teams, ensure team members have the skills to utilize communication tools, and ensure managers have the competence or ability to manage team members from diverse cultural backgrounds for successful virtual team implementation in banks (Kage, 2012). In addition, banks should consider the skills of prospective employees when recruiting them and if needed, arrange for training to improve their technology usage skills (Germain & McGuire, 2014) for effective knowledge sharing and collaboration (Alsharo, Gregg, & Ramirez, 2017).

Another important aspect discovered in the literature of banks and virtual teams relates to tools banks use to support virtual work. Some of the tools virtual teams in banks use include emails, telephone, and desktop sharing (Kage, 2012). Such communications tools help achieve stronger relationships among partners (Gonçalves, Ferreira, Gonçalves, Putnik, & Cruz-Cunha, 2014; Park & Lee, 2014). Other types of tools virtual team members in banks use to communicate and collaborate are SharePoint, Skype, Yammer for virtual teaming, video conference, instant messaging, as well as social media tools like Twitter and Facebook to manage virtual work (Etim & Huynh, 2015). Virtual teams in the banking industry use the above tools and technologies differently. Whereas some virtual teams use emails and telephones for daily interactions and teleconferencing for weekly and monthly meetings (Kage, 2012), others use Skype as

their main communication tool for day-to-day transactions (Etim & Huynh, 2015). Researchers argued information and communication technologies such as Skype, telephone, and Google Hangout, with both visual and audio capabilities, are excellent tools for instant communication (Jones & Graham, 2015; Wadsworth & Blanchard, 2015).

Interpersonal Trust

The purpose of this qualitative single case study is to explore strategies virtual team leaders in large corporate banks use to build trust among virtual team members. To achieve this objective, I use the interpersonal trust theory as the conceptual framework of the study because I believe the interpersonal trust theory's two-step approach for building trust in organizational teams lends itself to the nature of virtual teams. Interpersonal trust is the degree to which one person has confidence in, and is willing to act by the words, actions, and decisions of another (McAllister, 1995). Alternatively, organizational interpersonal trust is the desire of employees to trust one another, while accepting their vulnerability and demonstrating positive expectations vis-à-vis the actions of other employees (Chrupala-Pniak, Grabowski, & Sulimowska-Formowicz, 2016; Grabner-Kräuter & Bitter, 2015; Isik, Timuroglu, & Aliyev, 2015). These definitions of the interpersonal trust imply trust between team members is voluntary and based on current behavior or an expectation of future sound behavior.

Interpersonal trust theory. McAllister (1995) developed the interpersonal trust theory to understand the nature of interpersonal trust relationships in the workplace, factors affecting the building of trust, and the consequences of trust on behavior and

performance. McAllister (1995) used 194 managers and professionals enrolled at a southern California university executive business administration program to develop the interpersonal trust theory. The interpersonal trust theory comprises of two key constructs: cognition-based trust and affect-based trust (McAllister, 1995). According to the theory, cognition-based trust occurs in the initial stage of relationships between people in organizations, whereas affect-based trust occurs in the later stage of such relationships, and cognition-based trust influences the development of affect-based trust (McAllister, 1995; Newman, Kiazad, Miao, & Cooper, 2014).

Managers use cognition-based trust and affect-based trust to build trusting relationships with other employees (Chai & Dibb, 2014). The thrust of cognition-based trust is competence or ability, benevolence, and integrity (Wang et al., 2016), as well as reliability and dependency (McAllister, 1995). The basis of affect-based trust is confidence, emotion, and reciprocity (Wang et al., 2016). Therefore, for interpersonal trust to exist under the cognition-based trust, people must make intelligible judgments on, and rational assessments of, their peers. Unlike cognition-based trust, affect-based trust permits people to reveal positive feelings towards other peers (Kauffmann & Carmi, 2014). Revealing positive feelings towards other people, without assessing them, can open a person to vulnerabilities because trust between people involves a risk of disappointment (Hakanen & Häkkinen, 2015). The assessment of other people's integrity, competence, benevolence, reliability, and dependability is necessary and important because these attributes help trustors to make informed decisions when taking the risk to trust others (David Schoorman et al., 2016; Lin & Leung, 2014). Therefore, the two

constructs of the interpersonal trust theory are essential for building trust among virtual team members.

Interpersonal trust also referred to as the trust between people in organizations, is not only dynamic and complex (Guinot et al., 2014) but also necessary for team satisfaction and organizational performance (Cheng, Yin, Azadegan, & Kolfshoten, 2016; Schiller, Mennecke, Nah, & Luse, 2014). Interpersonal trust involves uncertainty, risk taking, vulnerability, and positive expectations (David Schoorman et al., 2016; Mislin, Williams, & Shaughnessy, 2015; Sellaro, Hommel, de Kwaadsteniet, van de Groep & Colzato, 2014; Ward, Kourti, Lazari, & Cofta, 2014). The risk, uncertainty, and vulnerability in relationships involve the likelihood of deceptions and failed expectations on the part of people choosing to trust others because they do not understand how the people they trust will act or behave (Cheng et al., 2016; Hakanen & Häkkinen, 2015; Kong, Dirks, & Ferrin, 2014).

Building interpersonal trust among workers in organizations is time-consuming, slow, requires patience, and a gradual process (Hakanen & Häkkinen, 2015; Grabner-Kräuter & Bitter, 2015). In the early stage of relationships among employees, interpersonal trust is not strong and easily breakable, but as time passes, interpersonal trust becomes stronger (Hakanen & Häkkinen, 2015; Nilsson & Mattes, 2015). Communication, frequent interactions, and the use of third parties or mediators are vital for building interpersonal trust, as well as for strengthening it (Hakanen & Häkkinen, 2015; Isik et al., 2015; Lai, Singh, Alshwer, & Shaffer, 2014).

Nam (2014) and Portis (2015) recommended strategies leaders can use to enhance interpersonal trust in organizations. The requisite strategies for making interpersonal trust the norm among employees in organizations consist of the following: communicating with employees, ascertaining employee needs and empowering them, creating a safe and friendly work environment for employees, investing in employees, promoting togetherness and building relationships among employees, and supporting employees to achieve their personal and professional goals (Nam, 2014; Portis, 2015). Creating an organizational climate of interpersonal trust among employees helps to enhance positive job-related results and relationships, open communication, employee well-being, and information sharing among members of teams (Hakanen & Häkkinen, 2015; Isik et al., 2015; Jiang & Probst, 2015).

Social interaction ties among employees (Hsu & Chang, 2014), as well as formal or informal face-to-face meetings (Hakanen & Häkkinen, 2015), are important antecedents of interpersonal trust in organizations. Hsu and Chang (2014) argued social interaction ties pertain to the frequency of communication, relationship strength, and the time employees spend together whereas, a vision of shared knowledge-sharing among employees relates to employees' willingness to assist others and learn from them. Social interactions influence the development of interpersonal trust through the memories of how team members behaved and reciprocated towards one another (Zarolia, Weisbuch, & McRae, 2017), and face-to-face meetings promote profound understanding between partners in an interpersonal relationship (Hakanen & Häkkinen, 2015). The relationship

between trust and social interaction is bidirectional. Interpersonal trust is necessary to start, institute, and sustain social relationships (Calefato, Lanubile, & Novielli, 2015).

Interpersonal trust influences knowledge sharing (Hsu & Chang, 2014; Raab, Ambos, & Tallman, 2014) and is important for the creation of a business network (Hakanen & Häkkinen, 2015). Organizational trust-building actions help interpersonal trust to impact inter-organizational relationships meaning the research on interpersonal trust goes beyond organizational relationships to inter-organizational relationships (Chrupala-Pniak et al., 2016). Interpersonal trust is trust between coworkers and a high level of interpersonal trust leads to a high level of knowledge sharing but a lower level of trust leads to less knowledge sharing (Rutten, Blaas-Franken, & Martin, 2016). Interpersonal trust, via the influence of communication frequency among team members, enhances the sharing of knowledge among them (Park & Lee, 2014).

Interpersonal trust is associated positively with team performance. Hence, organizations should primarily focus on improving team trust to achieve their desired goals in terms of team performance and productivity (Nirwan, 2014). Interpersonal trust is a crucial factor for enhancing public employees' commitment to their organization because institutional trust is largely dependent on widespread interpersonal trust (Baek & Jung, 2015). Leaders of organizations should pay more attention to the many ways of creating a community in which effective interpersonal relations create positive outcomes (Baek & Jung, 2015). Since interpersonal trust affects team's productivity (Isik et al., 2015), companies should promote the building of a harmonious, trusting, and team culture, as well as ensure team members perform their tasks based on trust.

Interpersonal trust constructs. According to the interpersonal trust theory, cognition-based trust is relevant for trust building among team members at the initial stage of relationships when team members are not familiar with each other, whereas affect-based trust emerges and takes over completely when team members start interacting (McAllister, 1995; Tamer & Dereli, 2014). Cognitive and affective factors or elements are important considerations for the development of interpersonal trust among employees in organizations (Chae, 2016). Cognition-based trust is task-oriented, whereas affect-based trust is relationship-oriented. Nilsson and Mattes (2015) argued cognition-based trust also referred to as initial trust is fragile, whereas affect-based trust known as gradual trust is resilient. This is because the former type of trust develops quickly while the latter type of trust develops over time from social interactions (Sekhon, Ennew, & Kharouf, 2014).

Cognition-based trust develops from trustors' first impression on others and their observation of trust-revealing cognitive cues (Chai & Dibb, 2014). Here, people perceive others as trustworthy based on their performance and accomplishments. Cognitive reasoning is the foundation of cognitive-based trust (McAllister, 1995). The connotation of this is if a team member views another team member as a great performer in the team and that impresses the team member, cognition-based trust develops. Competence, benevolence, and character of the person trusted are key determinants of cognition-based trust (Chae, 2016). These aspects form the basis of people's trust in others. The trustor uses rational thinking and judgments to assess the trustee's ability, integrity, and benevolence. Ability includes skills and competencies a trustor perceives in a trustee and

decides to invest his or her trust in the latter, whereas integrity includes principles and values of a trustee which a trustor accepts (Ho & Benbasat, 2014; Shazi, Gillespie, & Steen, 2015). Benevolence exists when a trustor believes a trustee will act in his or her best interest (Ho & Benbasat, 2014; Shazi et al., 2015).

Unlike cognition-based trust, which basis is the trustor's perception of others' abilities, the basis of affect-based trust is social emotional ties and interactions (Grichnik, Brinckmann, Singh, & Manigart, 2014). Here, trustors trust based on the feelings and emotions they have for trustees and are exclusive of any intelligible assessments completed on trustees (Chai & Dibb, 2014). Bonds between the trustor and the trustee develop based on emotions as opposed to rational judgments, and the feelings of care and concern increase the willingness of team members to trust others or accept vulnerability (Chae, 2016). Therefore, for affect-based trust, the emotional attachment of team members results in mutual care among members of organizations (Muneer, Iqbal, & Long, 2014).

Since McAllister (1995) created the interpersonal trust theory, various researchers have used the theory in diverse ways. Here, I review how subsequent authors have used and interpreted cognition-based trust and affect-based trust. In a study including 194 participants in South Korea to understand the impact of trust on subordinate employees' willingness to seek feedback from their supervisors, Choi, Moon, and Nae (2014) used the interpersonal trust constructs and concluded both cognition-based trust and affect-based positively influence subordinate employees' willingness to seek feedback from their supervisors on two different grounds. In this subordinate employee-to-supervisor

relationship, task-related knowledge, competence, and skills of supervisors influenced subordinates to value obtaining feedbacks from supervisors, whereas respect for one and other, as well as true care and concern for employees, influenced subordinates to seek feedback from supervisors (Choi, Moon & Nae, 2014). Knowledge, competence, and skills are the basis of cognition-based trust, whereas the respect for each other, care, and concern are the basis of affect-based trust (Tamer & Dereli, 2014). The findings of this study align with McAllister's (1995) to the extent of strategies for building trust through cognition-based trust and affect-based trust.

In another study to examine the roles of cognition-based trust and affect-based trust in relationships between transformational leaders and followers concerning task performance and job satisfaction, Zhu and Akhtar (2014) concluded transformational leaders could gain their followers' trust in both cognitive and affective domains. To cognitively trust their leaders, followers made rational judgments on their character regarding their integrity, reliability, and competence, and trusted those leaders on affective basis through emotional attachments stemming from social interactions (Zhu & Akhtar, 2014). In accordance with McAllister's (1995) interpersonal trust theory, trustees' integrity, reliability, and competence were the basis of building cognition-based trust, whereas emotional attachments in trustees helped build affect-based trust (Poon, Albaum, & Yin, 2017).

To comprehend the evolution of business relationships over time, Dowell, Morrison, and Heffernan (2015) examined the impact of the affective and cognitive elements of trust on performance in business relationships. The affect-based trust

elements included relational and intuitive, whereas those of cognition-based trust included competency, integrity, and goodwill. Affective elements of trust had impacts on relationship performance in the early stage while cognitive elements of trust positively impacted relationship performance in both the early and mature stages (Dowell, Morrison & Heffernan, 2015). The affective basis of trust in the early stage of the business relationship was because of the lack of relationship experience by trustors whose basis of trust in trustees was the expectation they will behave well (Dowell et al., 2015). The outcome of this study by Dowell et al. (2015) contradicts McAllister's (1995) interpersonal trust theory. According to the theory, the basis of trust in the initial stages of relationships is cognition-based, and as members start to interact, trust evolves from being cognition-based to affect-based, which ultimately takes over (Tamer, 2014). However, Dowell et al. (2015) concluded the perception of cognitive elements: competence, integrity, and goodwill were the basis of trust between partners in the later stage of the relationship. The implication is cognitive elements, like ability, benevolence, and integrity, can also develop trust in the advanced stage of relationships when emotional ties exist between partners or team members.

Extensive research exists about trustworthiness, interpersonal relationships, and interpersonal trust (Ewing, Caulfield, Read, & Rhodes, 2015; Farmer, McKay, & Tsakiris, 2014; Kharouf, Lund, & Sekhon, 2014; Maxwell & Lévesque, 2014; Sekhon et al., 2014). Key factors of trustworthiness include ability, benevolence, and integrity, and these factors help trustors to ascertain people worthy of trust (Ho & Benbasat, 2014; Shazi et al., 2015). In employee and supervisor relationships, employees trust supervisors

if the latter are highly competent and demonstrate care and concern for employees (Frazier, Gooty, Little, & Nelson, 2015). To investigate the influence of trustworthiness on cognitive and affect-based dimensions of trust in building trusting relationships within financial service organizations, Sekhon et al. (2014) viewed trustworthiness as completely different from interpersonal trust and argued the former influences the latter. The findings revealed trustworthiness impacts cognitive trust than affective trust and aspects such as expertise and competence, communication, concern and benevolence, shared values, as well as integrity and consistency, are necessary for determining trustworthiness (Sekhon et al., 2014). These findings align with McAllister's (1995) research findings on the interpersonal trust theory. That is, cognition-based trust is easier to build and used to set the stage for affect-based trust in which emotional ties develop from personal experience.

Research also exists on the impact of the constructs of interpersonal trust theory on leadership relationships. Researchers have argued interpersonal trust is vital in relationships involving subordinates and transformational leaders, making it a responsibility for transformational leaders to promote trust in every team by creating an open work environment (Cheng et al., 2016; Chen, Eberly, Chiang, Farh, & Cheng, 2014; Katou, 2015). Using the interpersonal trust theory, Zhu and Akhtar (2014) examined the impacts of affect-based and cognition-based trust on prosocial motivation in relationships between transformational leaders and their subordinates' willingness to help other coworkers. The results revealed both affect-based and cognition-based trust impact the relationship between transformational leaders and their subordinates' willingness to help

others, but their impact varied based on their degree of prosocial motivation. When followers had a high prosocial motivation, a positive relationship existed between affect-based trust and subordinates' willingness to help others, but when subordinates had a low prosocial motivation, a positive relationship existed between cognition-based trust and their willingness to help others (Zhu and Akhtar (2014). These findings align with McAllister's (1995) theory on interpersonal trust: affect-based trust develops from social interactions while cognition-based trust does not (Lapointe, Vandenberghe, & Boudrias, 2014; Zheng, Li, Wu, & Xu, 2014).

Researchers have used the interpersonal trust theory to explore knowledge sharing and how trust affects the way team members share information with each other. Knowledge sources inside organizations include project deliverables and team members or employees (Park & Lee, 2014). To exploit knowledge within organizations, team members must share it among themselves (Ghobadi, 2015; Salas, Shuffler, Thayer, Bedwell, & Lazzara, 2015). Trust enhances knowledge sharing, and building a climate of interpersonal trust enhances team members' willingness to share information with other team members (Hashim & Tan, 2015; Hung, Lai, & Chou, 2015; Liu, Rau, & Wendler, 2015). Rutten et al. (2016) investigated the effect of cognition-based trust and affect-based trust on knowledge transfers among co-workers and concluded the lack of trust among co-workers may hamper the sharing of essential information, thereby damaging the effectiveness of business processes. In accordance with McAllister's (1995) interpersonal trust theory, Rutten et al. (2016) argued both cognition-based trust and affect-based trust influence team members' knowledge sharing behavior with affect-

based trust having the most impact. Affect-based trust has a higher impact because knowledge sharing requires a social setting for people to interact and liaise with one another (Chong & Besharati, 2014; Ding, Ng, & Li, 2014; Ghobadi, & Mathiassen, 2016; Rutten et al., 2016).

Researchers have also used the interpersonal trust theory in the context of virtual teams or online settings. To comprehend the relationship between the two constructs of McAllister's (1995) interpersonal trust theory: cognition-based trust and affect-based trust, Wang et al. (2016) used 215 undergraduate students at a University in Hong Kong with online experience and concluded cognition-based trust positively influences affect-based trust. As McAllister (1995) concluded, Wang et al. (2016) argued cognition-based trust is not long-lasting but evolves and disappears when the affect-based trust or emotional trust develops. The implication of this study is albeit arguments exist in the literature about the extreme difficulty in establishing social interactions and trust in virtual team settings for knowledge sharing (Raab et al., 2014), these findings help demonstrate leaders can build interpersonal trust using cognitive and affective elements.

Luo & Zhang (2016) explored how interpersonal trust develops in a virtual community with online and offline interactions among members with no face-to-face meetings or work relationship. They argued interpersonal trust in a virtual community develops in three stages: early stage, middle stage, and late stage. Factors affecting the development of trust in these three stages include information flow, externalized symbols of interpersonal trust, social roles, confirmed identity, dynamic information, high-frequency interaction, and mutual assistance (Luo & Zhang, 2016). The findings revealed

in the early stage of relationships, interpersonal trust is not profound, and interactions are mostly online, but as communication deepens between members, interactions move from online to face to face and interpersonal trust builds from the courtesy stage to instrumental stage and ultimately, to the emotional stage (Luo & Zhang, 2016). The findings align with McAllister's (1995) interpersonal trust theory. The trust in the early stage is cognition-based trust based on rational observations and perceptions while affect-based trust which involves emotional ties and social interactions (Chai, Malhotra, & Alpert, 2015) is the trust in the late stage of the relationship. Albeit McAllister (1995) does not allude to the middle stage in the process of trust development in interpersonal relationships, this is where cognition-based trust transitions to affect-based trust. Based on this study, face-to-face interactions are essential building interpersonal trust in virtual settings. Face-to-face communication helps team members to observe verbal cues (Purvanova, 2014) and perceive others for the development of cognitive or affective trust.

Given the prevalence of virtual teams and social media websites, Kuo and Thompson (2014) investigated whether social tie is an antecedent of trust development in virtual environments among new or unknown teammates. The results revealed social tie within virtual environments is not a basis of interpersonal trust when team members start working together (Kuo & Thompson, 2014). This finding corroborates McAllister's (1995) interpersonal trust theory because social ties among team members only occur when team members interact with one another after the development of cognition-based trust.

Using 873 virtual team members in the United States to understand the relationships between team trust, team leader personalities, and team perceived effectiveness, Pierce and Hansen (2013) concluded cognitive and personality-based trust mediates team effectiveness via the influence of team leaders' personality. This outcome of the Pierce and Hansen study aligns with McAllister's (1995) finding on the relevance of cognition-based trust at the start of relationships between team members because, without regular face-to-face interactions between members of virtual teams, trust can only develop based on how reliable, dependable, and competent team members are. Frequent interactions, reciprocal support, as well as strong and profound relationships, are relevant aspects of building interpersonal trust among employees working in various geographical locations (Lai et al., 2014).

Finally, Ha, John, John, and Chung (2016) examined the impact of cognitive trust and affective trust on online shoppers' behavioral intentions over time. Both cognitive trust and affective trust directly influenced behavioral intentions of online shoppers (Ha et al., 2016). In addition, cognitive trust directly influenced affective trust, but over time, affective trust's impact on online shoppers' behavioral intentions was greater (Ha et al., 2016). These findings align with the interpersonal trust theory because cognitive trust developed first and as time passed, affective trust took over and replaced cognitive trust.

Swift trust theory. As opposed to the interpersonal trust theory, the focus of the swift trust theory is on assumptions team members form about each other's competence or abilities during team creation, which they validate when team work starts (Crisp & Jarvenpaa, 2015; Germain & McGuire, 2014; Meyerson, Weick, & Kramer, 1996; Yang,

2014). Swift trust is a quick way of initiating trust among virtual team members who must complete a specific, short-term assignment (Buvik & Rolfsen, 2015; Haines, 2014). Unlike interpersonal trust, which develops after virtual team members start working together and deepens over time, swift trust builds before team members begin working together and strengthens with the validation of the trustor's expectations. The validation of trustors' expectations occurs after interdependent work starts.

Since trustors form trusting beliefs about other team members before validating their beliefs, swift trust is fragile (Haines, 2014). Swift trust is also fragile because presumptions or presumptive beliefs are the basis of the initial trust, making trustors more vulnerable to disappointment (Curnin, Owen, Paton, Trist, & Parsons, 2015; Latusek-Jurczak & Prystupa-Rządca, 2014). Swift trust in short-term virtual teams occurs because team members suspend concerns or issues of uncertainty, risks, and vulnerability to trust others, and at the same time demonstrating their trustworthiness (Meyerson et al., 1996).

A major benefit of swift trust in virtual teams is using it to nurture trust among team members when limited time exists to build trust, or team members have very limited interactions between them (Crisp & Jarvenpaa, 2015; Latusek-Jurczak & Prystupa-Rządca, 2014). In situations where team members do not understand the competence of other team members, swift trust can form the basis of cooperation for the completion of task (Buvik & Rolfsen, 2015) because Yang (2014) argued swift trust will develop among team members with a similar identity at the time of team creation. Although swift trust is useful for short-term virtual teams, this trust type is unimportant for long-term virtual teams, needing stronger and deeper forms of trust like interpersonal trust to

achieve their goals. Unlike interpersonal trust whereby social presence is essential for the formation strong relationships, swift trust does not need social interactions (Germain & McGuire, 2014).

Swift trust development is dependent on trustees' working on a specific task (Curnin et al., 2015) for trustors to validate their beliefs and confirm or disconfirm their expectations. When trustors validate their beliefs about trustees, the outcome is confirmation of swift trust but if otherwise, the outcome is distrust (Yang, 2014). Building swift trust in virtual teams is complex because team members must comprehend other team members' roles, responsibilities, and values to validate their beliefs about them (Spinuzzi, 2014). Where virtual teams are large with many team members, keeping keep track of all team members' information to confirm expectations is challenging. This limitation of swift trust concerning large virtual teams helps explain why Latusek-Jurczak and Prystupa-Rządca (2014) argued swift trust will develop where virtual teams have a limited number of members.

Other challenges in developing swift trust in virtual teams include the absence of bonds between team members, limited knowledge on the use of virtual team technologies, and differences in cultural backgrounds (Germain & McGuire, 2014). To overcome these challenges and promote swift trust for high performing virtual teams, virtual team leaders must possess the right skills to manage cultural differences, communication, conflicts, and the overall team (Germain & McGuire, 2014). Other key factors that help develop swift trust in virtual teams include team members' ability to keep short-term promises and provide quick responses to messages from other team

members (Latusek-Jurczak & Prystupa-Rządca, 2014). Despite the benefits of swift trust to virtual teams and strategies for virtual team leaders to overcome swift trust building challenges, the theory's limitations make it less suitable than interpersonal trust for building stronger trust bonds in long-term virtual teams and virtual teams with many team members.

Trust and virtual teams. The focus of this section is on the role of trust in virtual teams and the strategies for building trust in these non-traditional types of teams. Trust is a key factor for virtual teams' effectiveness and performance (De Jong, Dirks, & Gillespie, 2016; Ford, Piccolo, & Ford, 2016) and for virtual teams to perform well, team members must trust each other and trust their leaders (Gilson et al., 2015). Researchers have argued trust in the organization, management, workplace are essential for effective virtual teamwork (Gilson et al., 2015; Grabner-Kräuter & Bitter, 2015; Isik et al., 2015). Duran and Popescu (2014) argued trust is the most crucial factor for virtual team success. This is the reason interpersonal trust is necessary for knowledge sharing (Goh & Sandhu, 2014; Jain, Sandhu, & Goh, 2015) because when trust level increases in virtual teams, team members are more willing to share and receive knowledge (Wu & Zhang, 2015).

Trust influences virtual team performance the most when team members engage in interdependent activities or tasks, and increases the desire of team members to share information by assuming other team members' intentions are good, even though they do not understand how these other team members will utilize the shared information (De Jong et al., 2016; Olaisen & Revang, 2017). This is because when trust develops, team members stop judging their peers, thereby overcoming virtual teams' conflicts or

misunderstandings (De Jong et al., 2016). In addition, researchers have argued trust is an important prerequisite for completing tasks and enhancing learning in virtual teams by encouraging team members to provide feedbacks (Peñarroja et al., 2015; Yao, Tsai, & Fang, 2015).

Despite the importance of trust in virtual teams, building trust in such settings remains difficult (Ward et al., 2014) because of the absence of face-to-face meetings and frequent social interactions among team members, which are necessary for building trusting interpersonal relationships (Bonet Fernandez & Jawadi, 2015; De Paoli & Ropo, 2015; Kauffmann & Carmi, 2014; Liao, 2017). Jarvenpaa and Leidner (1999) argued interpersonal relationship is the basis of trust in virtual teams. Since trust is dependent on interpersonal relationships, which emanate from face-to-face interactions, the onus is on virtual team leaders to design new ways for building effective teams with trusting relationships among team members to achieve their objectives. The stronger the relationship among team members, the more productive virtual teams are (Watanuki & Moraes, 2016). Virtual teams are unique because team members work from various geographical locations and communicate virtually through information and communication technologies: instant messaging, email, online chat, and videoconferencing (Minas, Potter, Dennis, Bartelt, & Bae, 2014). The dispersion of team members in virtual teams results in feelings of isolation, which in turn account for the difficulty in developing trust in virtual teams (El-Sofany et al., 2014). Virtual team leaders must seek strategies to create an interactive team and overcome isolation. In this

regard, communication is the most effective way of building trust among team members (Duran & Popescu, 2014).

Creating a climate of trust in teams helps improve team members' satisfaction and mental well-being (Guinot et al., 2014) as well as the overall effectiveness or performance of the team (Rao, 2015). Interpersonal trust helps develop peer support interactions between employees in the workplace by increasing employees' willingness and confidence in sharing their feelings with peers and this helps to enhance the belief of employees they can depend on their peers for assistance (Tamer & Dereli, 2014). Virtual team leaders have the responsibility for building trust in virtual teams (Liao, 2017). Given the unique nature of virtual teams, virtual team leaders need specific skills to build trust among team members (De Paoli & Ropo, 2015; Marinescu, Toma, & Ștefan, 2015). Some of such skills include an excellent command of technology and the ability to select effective communication and collaboration tools; effective communication skills; respect for team members and their cultural backgrounds; and the ability to speak multiple languages (Dumitrescu, Lie, & Dobrescu, 2014). The ability to speak many languages is not just a skill required for virtual team leaders but for team members as well. Luring and Klitmøller (2015) argued language barriers could reduce emotion-based trust even when frequent interactions exist among virtual team members.

According to McAllister's (1995) interpersonal trust theory, trust develops in teams through cognitive and affective dimensions. Team leaders can build trust in virtual teams using the cognitive and affective dimensions of the interpersonal trust theory. The cognitive bases of interpersonal trust include ability, integrity, and benevolence

(McAllister, 1995; Tenzer, Pudelko, & Harzing, 2014). To build trust among virtual team members, team leaders must establish these traits within their virtual teams. Here, the development of trust is task-oriented and based on virtual team members' rational judgments on others (Pangil & Moi Chan, 2014). Various aspects exist for virtual team leaders to enhance the traits of ability, integrity, and benevolence and build cognition-based trust among virtual team members. These include frequent communication; communication of work progress; being responsive, time conscious, punctual to meetings, transparent, and authentic; and communication of team objectives and team members' abilities (Kauffmann & Carmi, 2014; Nam, 2014). Promoting trust conversations within the team, paying attention to everyone, encouraging team members' participation, keeping promises, encouraging knowledge sharing, managing conflicts, and recognizing team members' diligent work are essential for building cognition-based trust (Kauffmann & Carmi, 2014; Nam, 2014).

The affective bases of interpersonal trust include emotional ties or bonds and the reciprocity of care and concern among team members (McAllister, 1995; Tenzer et al., 2014). Virtual team leaders must establish emotional ties or bonds to build affect-based trust in virtual teams. Trust development, here, is relationship-oriented, based on team members' emotions towards others, and requires social interactions or exchanges between team members (Miao, Newman, & Huang, 2014; Tenzer et al., 2014).

Organizing icebreaker games and virtual social meetings; improving social interactions; revealing interest in team members' personal lives; creating opportunities for face-to-face meetings; and using social networks for interactions are factors virtual team leaders could

use to enhance affect-based trust within virtual teams (Kauffmann & Carmi, 2014).

Combining online communications with face-to-face interactions, and involving virtual team members in organizational activities are interpersonal trust-building strategies relevant for creating a social presence and abating feelings of isolation in virtual teams (Ford et al., 2016; Luo & Zhang, 2016).

The lack of face-to-face interactions in virtual teams means the only way to develop trust is via information and communication technologies (Ford et al., 2016). Without face-to-face meetings, trust develops between virtual team members through frequent online social interactions to allow the sharing of high-quality knowledge (Olaisen & Revang, 2017). Understanding the appropriate types of technologies for virtual team communication and interaction, and how to use them (Malhotra & Majchrzak, 2014) are important trust building skills for virtual team leaders and team members. Communication tools such as telephones, email, and instant messaging are essential for virtual teams' effectiveness (Al-Ani, Marczak, Redmiles, & Prikladnicki, 2014; Saafein & Shaykhian, 2014). These tools are key for building trust because global virtual team members use them for collaboration and communication (Al-Ani et al., 2014). However, using communication technologies to promote team member participation and build trust in virtual teams can negatively affect the interdependence necessary effectiveness (Crisp & Jarvenpaa, 2015). Klitmøller, Schneider, and Jonsen (2015) argued when virtual team members use telephones, sentiments of uncertainty abound because proficient English language speakers encounter difficulties in understanding less-proficient virtual team members. Using written media, such as email,

helps abate or remove uncertainty because email has functions like grammar and spell check, which help correct language errors (Klitmøller et al., 2015).

Apart from the above, researchers have identified other strategies for building trust in virtual teams. Some of the strategies include openly offering information, ideas, thoughts, feelings, intuitions, and reactions to collaborative work; sharing materials and resources with team members; communicating respectfully with team members; expressing beliefs about group members; and communicating expectations of other team members to contribute positively (Gerbasi & Latusek, 2015; Nam, 2014). Establishing communication norms early in virtual teams (Henderson, Stackman, & Lindekilde, 2016) and interacting with team members using polite electronic communications help build interpersonal relationships and trust (Hansen, 2016; Yilmaz, 2016). Worthy of note is the development of trust in virtual teams varies depending on whether the virtual team is short-term or long-term. Only cognition-based trust develops in short-term virtual teams while both cognition-based and affect-based trusts develop in long-term virtual teams (Kauffmann & Carmi, 2014). The time needed for each of the interpersonal trust dimensions to develop is the determining factor or rationale for this. The development of affect-based trust is gradual because nurturing relationships among virtual team members for deeper trust is time-consuming.

Transition

The objective of this qualitative single case study was to explore strategies virtual team leaders in large corporate banks use to build trust among virtual team members. Section 1 is the foundation of this study. Foundational elements included a background of

the problem, the problem statement, purpose statement, nature of the study, research and interview questions, conceptual framework, operational definitions, limitation, assumptions, and delimitation, and significance of the study. The final but essential component of Section 1 was the review of professional and academic literature. The literature reviewed for this study comprised of virtual teams, virtual teams' history, virtual teams' benefits and challenges, virtual teams and banks, the interpersonal trust theory and its constructs, and trust in virtual teams. The literature review portion also included a comparison of the conceptual framework: interpersonal trust theory with the swift trust theory for suitability in this study. Section 2 is the research project plan and will include a description of the study's purpose, role of the researcher, criteria of research participants, research method and design, research population and sampling strategies, ethical research standards, data collection instruments, data collection techniques, data organization techniques, data analysis techniques, and research reliability and validity. Section 3 will contain the research data analysis, conclusions based on findings, implications for social change, and suggestions for actions and future research opportunities.

Section 2: The Project

The focus of Section 2 is to expound on the research approach, processes, and plan for conducting this qualitative single case study. In Section 2, I systemically discuss the following aspects of the study: purpose statement, role of the researcher, participants, research method and design, population and sampling, ethical research, data collection instruments, data collection techniques, data organization techniques, data analysis, and reliability and validity.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies virtual team leaders in large corporate banks use to build trust among virtual team members. The target population for this study included six virtual team leaders with successful experience building trust among virtual team members at a large corporate bank headquartered in the northeast region of the United States. The implications for positive social change include the potential for providing team leaders with effective strategies for building trusting relationships within virtual teams. By improving the work environment, employers can promote the overall mental and physical health and wellbeing of employees beyond the workplace (Wyatt et al., 2015).

Role of the Researcher

In qualitative studies, the researcher is the main instrument for collecting data because the researcher initiates and conducts the study (Hernández-Hernández & Sancho-Gil, 2015; Saxena, 2017). My role as the researcher in this study involved collecting, transcribing, and interpreting all research data. The researcher also makes key decisions

regarding the research question, composition of the research sample, and selection of research participants and is the source of ideas or topic for the study (Leedy & Ormrod, 2014; Sutherland, Dawczyk, Leon, Cripps, & Lewis, 2014). Having worked as part of virtual teams for more than 4 years, I was confident in collecting pertinent and impartial research data for this study.

The nature of qualitative research makes it easy for researcher bias to occur because the researcher's experience can influence research validity and reliability (Ben-Ari & Enosh, 2016). Researchers must avoid bias and have open minds with respect to research data and participants to achieve reliable outcomes (Birt, Scott, Cavers, Campbell, & Walter, 2016; Smith & Noble, 2014). Bias occurs in research when the researcher fails to eliminate personal views, feelings, principles, and ethics from the research process (Ben-Ari & Enosh, 2016; Moustakas, 1994). Therefore, as the primary research instrument of this study, I kept my personal beliefs, feelings, ethics, and culture from the entire research process to help eliminate or abate bias. The research process includes selecting research participants, collecting data, transcribing data, analyzing or interpreting data, and reporting research findings (Chereni, 2014; Marshall & Rossman, 2016; Teusner, 2016). Researchers' past experiences with a topic or phenomenon could affect the research process (Cope, 2014). The implication is that my experience working as part of virtual teams for more than 4 years could have led to researcher bias. I mitigated this bias through bracketing. Bracketing entails undermining the researcher's experiences and allowing research participants' experiences to emerge without interference (Trepal, Stinchfield, & Haiyasoso, 2014). A technique for achieving

bracketing in research is to use open-ended questions during data collection (Trepal et al., 2014). In this study, I asked each participant eight open-ended questions to gather data.

As the researcher of this study, I was respectful and just to all research participants. The U.S. Department of Health and Human Services requires all researchers conducting studies involving human beings to abide by ethical principles in the Belmont Report of 1979 such as justice, beneficence, and respect for persons (Bromley, Mikesell, Jones, & Khodyakov, 2015; Metcalf, 2016). These principles require additional protection for vulnerable participants or groups (Bromley et al., 2015; Schrems, 2014). The Belmont Report is a set of ethical principles or guidelines protecting research participants against misuse, unfair treatment, and coercion to participate in research studies (Marshall & Rossman, 2016). I did not maltreat or coerce participants in the study. Participants were free to withdraw from the study at any time. The Belmont Report has protections for participants susceptible to unjust research. Keeping participants' information private and confidential is the responsibility of the researcher and helps protect participants' identity and reputation (Leyva-Moral & Feijoo-Cid, 2017; Reed, Khoshnood, Blankenship, & Fisher, 2014). Participant data are currently secure in a password-protected laptop. In compliance with the Belmont Report, I explained the benefits and risks of the research to all participants. Participating in this study involved no risks. Before taking part in the study, I articulated the absence of risks and benefits of the research to participants.

The interview protocol serves as a guide for researchers when conducting interviews with research participants (Besley, Dudo, Yuan, & Abi Ghannam, 2016).

Interview protocols help facilitate interactions between the researcher and participants and help the researcher ask relevant questions for the collection of quality data (Ishak & Bakar, 2014). Interview protocol guidelines are helpful to the researcher in eliminating bias while collecting and presenting data from participants (Koch, Niesz, & McCarthy, 2014). Lewis (2015) recommended the inclusion of research details in interview protocols. The interview protocol included the rationale for interviews, an introduction, as well as open-ended questions. Using open-ended questions allows research participants to answer research questions from diverse perspectives without restrictions (Yin, 2017). In this study, open-ended questions were useful in the collection of rich data from research participants. The interview protocol included a complete list of interview questions for discussion with participants and the achievement of data saturation.

Participants

To achieve the objective of this study, research participants comprised virtual team leaders working for a large corporate bank headquartered in the northeast region of the United States. Virtual team leaders selected for this study resided in different geographical locations within the United States. Researchers must ensure that participants have the relevant knowledge to effectively participate in their research (Yin, 2017). Participants in this study were knowledgeable in strategies for building trust among virtual team members. Members of the target population must satisfy eligibility criteria for inclusion in a study (Arcia, 2014). The eligibility criteria for this study included virtual team leaders (a) working for a large corporate bank, (b) with at least 1 year of work experience in the target organization, and (c) with at least a year of successful trust-

building experience in virtual teams. Defining the eligibility criteria clearly allows researchers to effectively compare their research results with those of other studies (Watts, Williams, Kim, Bramwell, & Krishnan, 2017). The eligibility criteria ensure the selection of relevant participants for a study (Arcia, 2014).

Gaining access to participants is extremely challenging because of the uneasy experiences a researcher may encounter during the process (Grant, 2017; Peticca-Harris, deGama, & Elias, 2016). Gaining participant access involves searching for potential candidates for the study, contacting them, and interacting with them for data collection (Peticca-Harris et al., 2016). Researchers gain access to research participants directly or indirectly. Indirect strategies for gaining participant access include inquiring with managers of organizations and personal acquaintances (Peticca-Harris et al., 2016). Business listings from local chambers of commerce were the means to gain access to target organizations and managers of participants. Local chambers of commerce have listings of businesses within the geographical area. I used the eligibility criteria of this study to narrow my search of potential organizations. My first search involved the identification of all banks listed in the local chambers of commerce. After creating a list of banks within the geographical area, I identified all those considered as large corporate banks. Chambers of commerce business listings also have physical addresses, email addresses, and telephone numbers. I used this information to contact and gain access to the target organization. I made telephone calls to eligible organizations and sought permission from human resource managers to conduct my study. Since rejection is one of the outcomes in the process of gaining access, Peticca-Harris et al. (2016) recommended

that researchers re-strategize if denied access. I received many rejections in the process of trying to gain access. The strategy used for rejection of access in this study was to continue calling other eligible organizations until I gained access. Upon receiving acceptance from an eligible organization to participate in this study, I sent a letter of cooperation to the human resource manager for signature via email. After receiving the signed letter of cooperation, I forwarded it to the Walden Institutional Review Board (IRB) for approval. Once I received IRB approval, I sent a request for referrals from the human resource manager to virtual team leaders with the knowledge and experience needed for this study. I provided the human resource manager a letter of invitation (see Appendix B) to send to virtual team leaders. The letter of invitation included the purpose of this study, a description of the eligibility criteria, and a statement asking virtual team leaders interested in the study to reach out to the researcher directly. When virtual team leaders indicated their willingness to take part in the study, I sent them the informed consent form. These virtual team leaders helped refer other virtual team leaders within the organization with the knowledge and experience required for the proposed study.

After securing access to participants, researchers maintain access by establishing relationships with participants (Grant, 2017). Trusting, genuine, comfortable, open, and respectful relationships between researchers and participants yield quality research data (Kowal, Bubela, & Jardine, 2017; Kral, 2014; Olsen, Lehto, & Chan, 2016). I engaged research participants through both email and telephone. I remained honest, genuine, open, and respectful at all times to maintain access and establish relationships. Establishing

honest relationships builds trust, which helps participants share their experiences freely (Seitz, 2016).

Research Method and Design

When conducting research, choosing the correct research method and design is an important factor. Qualitative, quantitative, and mixed methods are the three types of research methods (Yin, 2017). The research question is the basis for selecting the correct research method in any study (Yin, 2017). The research method for the proposed study was qualitative and the research design was a single case study because it involved the exploration and discovery of strategies virtual team leaders use to build trust among virtual team members in one organization. The focus of qualitative research and case study is discovery (Park & Park, 2016). Researchers use case study design to collect data through multiple sources for an in-depth inquiry (Yin, 2017). Using the qualitative research method and single case study design, I discovered effective trust-building strategies.

Research Method

The qualitative research method was appropriate for the proposed study. Researchers use the qualitative research method to explore descriptive accounts of, and similarities and differences between, various social events (Park & Park, 2016). Qualitative research allows for an in-depth understanding of participants' experiences in their natural settings by obtaining information directly from them (Fujiura, 2015; Marshall & Rossman, 2016; Yin, 2017). Qualitative researchers use open-ended interviews and observation to collect data from research participants (Vohra, 2014; Yin

2014). Qualitative studies are exploratory in nature (Yin, 2017). Given the purpose of this study, which was to explore strategies virtual team leaders use to build trust among members of virtual teams, the qualitative research method was appropriate.

Quantitative research and mixed methods were the two alternative research methods considered for this study. Researchers use the quantitative research method to identify and justify relationships between variables (Mayer, 2015; Park & Park, 2016). Quantitative research is relevant for testing theories or hypotheses using numerical data to determine statistical relationships (Marshall & Rossman, 2016; Yin, 2017). Since the examination of relationships, theories, or hypotheses were not part of this study, the quantitative method was not appropriate. Mixed-methods research is appropriate when the researcher chooses to combine the quantitative and qualitative research methods (Hyett, Kenny, & Dickson-Swift, 2014; Johnson, 2015). This research method is appropriate when researchers collect data to conduct simultaneous qualitative and quantitative data analysis (Enosh & Ben-Ari, 2016; Yin, 2017). Mixed-methods research was not appropriate for this study because it did not have a quantitative component.

Research Design

The single case study design was appropriate for this study because the focus was on a single organization. Case studies are exploratory, explanatory, or descriptive (Yin, 2017). Researchers use the case study design when they want to gain deep insights into a complex contemporary phenomenon by using multiple data sources and collection techniques (Tumele, 2015; Yin, 2017). The case study design was appropriate for this study because I wanted to explore strategies virtual team leaders use to build trust among

virtual team members and use data from multiple sources to conduct a valid and reliable analysis.

Other qualitative research designs considered for this study included the phenomenological, ethnographic, and narrative designs. Researchers use the phenomenological design to understand meanings of people's lived experience about a phenomenon (Corby, Taggart, & Cousins, 2015; Finlay, 2014; Matchim & Kongsuwan, 2015; VanScoy & Evenstad, 2015). The phenomenological design was not appropriate for this study because I did not plan to explore lived experiences. Rather, I planned to explore strategies virtual team leaders use to build trust among virtual team members. Additionally, the small sample size of this qualitative single case study did not meet the requirements for phenomenological studies. Researchers use the ethnographic design when they want to explore and observe the culture of a group of people in a real-life setting over an extended period (Chan et al., 2014; Mannay & Morgan, 2015; Suopajarvi, 2015; Van Maanen, 2015). The ethnographic design was not appropriate for this study because I did not plan to explore or observe the culture of a group of people. Finally, researchers utilize the narrative design to study people's life experiences or stories and then present outcomes in the form of a narrative (Bruce, Beuthin, Sheilds, Molzahn, & Schick-Makaroff, 2016; Jones, 2016; Simmonds, Roux, & Avest, 2015). Since the purpose of this study was not to explore individuals' life experiences or stories, the narrative design was not appropriate.

Data saturation, an important concept in qualitative research, occurs when data collected from research participants through interviews become repetitive with the

emergence of no innovative ideas, themes, or information (Boddy, 2016; Hagaman & Wutich, 2017; Yin, 2017). Data saturation in this qualitative single case study occurred through participant interviews, follow-up questions, member checking, and data triangulation with documents. Data saturation is not dependent on a study's sample size but rather, on the accuracy and reliability of data collected (Fusch & Ness, 2015). Asking follow-up questions assisted in ensuring the collection of quality data for data saturation. Another approach for achieving data saturation is through triangulation and member checking (Fusch & Ness, 2015; Graue, 2015; Tibben, 2015). Member checking allows for participant review of researchers' description and interpretation of information collected during interviews to avoid misinterpretations (Birt et al., 2016; Caretta, 2016). Member checking helps ensure the accuracy of participant answers obtained through interviews (Elo et al., 2014; Marshall & Rossman, 2016). Documents such as the handbook, code of conduct and ethics, and employee diversity policy were other data collection sources for data triangulation and saturation. Owen (2014) argued documents are a useful source of research data.

Population and Sampling

The population of this study included virtual team leaders in a large corporate bank headquartered in the northeast of the United States. The sampling methods for this research study included purposeful and snowball sampling. The purposeful sampling method is a non-random technique for selecting information-rich participants based on eligibility criteria to answer the research question (Gentles et al., 2015; Palinkas et al., 2015; Robinson, 2014). Bungay, Oliffe, and Atchison (2016) recommended the

purposeful sampling strategy for qualitative studies. Purposeful sampling was useful in identifying research participants with important insights on strategies virtual team leaders use to build trust among virtual team members. I used purposeful sampling to identify and select participants based on the eligibility criteria. Snowball was the additional sampling technique for identifying research participants. Using the snowball sampling technique, researchers ask one participant after the other to recommend colleagues they believe might meet the study's eligibility criteria, leading to a chain of referrals until the sample size is complete (Robinson, 2014; Waters, 2015). Snowball sampling is an effective strategy for getting access to hard-to-reach individuals (Brañas et al., 2016; Waters, 2015; TenHouten, 2017). Participants are difficult to reach when they are inaccessible (TenHouten, 2017). Hence, I utilized the snowball sampling strategy to obtain the number of participants needed for this study.

The sample size of the proposed study was six virtual team leaders who met the participation requirements. This sample size is sufficient for the qualitative single case study because as Yin (2014) argued, case study involves the use of multiple data sources. Qualitative study sample sizes vary because there exists a relationship between sample size and the phenomenon under inquiry (Crowe, Inder, & Porter, 2015; Morse, 2015). Highly ambiguous topics require a large sample size (Morse, 2015). Since the exploration of effective strategies for building trust within virtual teams is not highly ambiguous, the sample size recommended for this study was suitable. Additionally, if identified individuals possess the required knowledge and experience in a research topic, a small sample size is sufficient (Malterud, Siersma, & Guassora, 2016). Participants in this study

had the necessary experience and knowledge. Rohrbach, Anderson, and Laube (2016) argued a sample size of three is sufficient if no additional ideas emerge after the third interview. The rationale is data saturation helps justify sample size since data collection stops when no new knowledge emerges (Fusch & Ness, 2015; Malterud et al., 2016). Triangulation is an approach for achieving data saturation (Graue, 2015). Data saturation occurs when researchers gain no new themes or ideas from data collected (Fusch & Ness, 2015; Graue, 2015; Tibben, 2015; Wilson, 2014). Member checking and follow-up questions were useful in the attainment of data saturation. Member checking helps ensure the accuracy of answers obtained from participants through interviews (Caretta, 2016; Elo et al., 2014; Marshall & Rossman, 2016) because research participants have an opportunity to validate interpretations of interview responses during member checking interviews. Data from documentation such as the employee handbook, code of conduct and ethics, and employee diversity policy helped achieve data saturation. Documents assist researchers to understand organizations (Bryman & Bell, 2015) and the analysis of documents provides useful research data (Owen, 2014). Data collection from multiple sources, as opposed to a single source, increases the reliability of case studies' findings (Yin, 2017).

Participant selection criteria for this study included virtual team leaders (a) working for a large corporate bank, (b) with at least 1 year of work experience in the target organization, and (c) with at least a year of successful trust-building experience in virtual teams. These selection criteria for research participants were in accordance with interview validity requirements. For participants to be eligible for selection and

interviewing in research, they must possess the relevant knowledge and experience in the research area (Robinson, 2014; Yin, 2017). The selection and interview validity requirements for this study included virtual team leader trust-building experience and knowledge. Selected virtual team leaders for this study were able to provide insights on strategies for building trust in virtual teams. Gender was not a criterion for this study, and all participants were above the age of 18. Yin (2014) recommended the use of interviews for qualitative studies. In-depth interviews were suitable for this study. Face-to-face interview is the most ideal form of interviews because researchers meet with participants in-person, establish a connection with them, and have the opportunity to observe visual cues, body language, and facial expressions (Deakin & Wakefield 2014; Seitz, 2016). Despite these advantages, face-to-face interviews are costly and time-consuming because researchers or participants need to travel to specific locations (Mahfoud, Ghandour, Ghandour, Mokdad, & Sibai, 2015). Since research participants lived and worked in different geographical locations, interviews were over the phone and audio recorded for transcription. Phone interviews, as opposed to face-to-face interviews, are practical, convenient, and comfortable for participants because they do not have to incur any travel expenses (Deakin & Wakefield 2014; Drabble, Trocki, Salcedo, Walker, & Korcha, 2015; Seitz, 2016). Interviewees participate in interviews at a time most convenient to them (Lewis, 2015). In this study, phone interviews occurred when it was suitable for participants to minimize any inconveniences. Skype interview was an alternative to phone interview, but all participants preferred the latter.

Ethical Research

Before collecting data for this study, the Walden University IRB evaluated the proposal to ensure it satisfied ethical research protection standards. Since ethical issues could occur during the process of research involving humans, the IRB reviews and approves research proposals (Bromley et al., 2015). The IRB approved my study after a thorough review. The IRB approval number for this study was 04-05-18- 0630887.

Researchers are responsible for ensuring adherence to ethical standards and practices during the research process, and this involves the creation of documents containing ethically acceptable behavior (Annink, 2017; Bromley et al., 2015). Each participant received an informed consent form and a letter of invitation (see Appendix B) and provided his or her acceptance to participate. Research participants must sign a consent form acknowledging their comprehension of the consent (Bloomberg & Volpe, 2016). Upon signing the informed consent form and letter of invitation, research participants agreed to abide by ethical behaviors stated therein.

Important ethical research standards include informed consent, confidentiality, withdrawal rights, voluntary participation, and conflicts of interest avoidance (Annink, 2017; Leach et al., 2016; Leyva-Moral & Feijoo-Cid, 2017; Thorpe, 2014). The informed consent standard helps ensure research participants have enough information to decide whether to participate in a study (Guillemin et al., 2016; Judkins-Cohn, Kielwasser-Withrow, Owen, & Ward, 2014). Providing information about the purpose of the research to participants aligns with ethical standards and enhances participants' protection (Smalley et al., 2015). After IRB approval, potential participants first received a letter of

invitation (see Appendix B) via a human resource manager of the research organization requesting their participation in the study. Once participants agreed to take part in the research, but before conducting interviews, they received informed consent forms through email. Research participants may provide their consent to participate in research studies via email (Bella, 2014; Besley et al., 2016; O'Brien, Harris, Beckman, Reed, & Cook, 2014). Therefore, I asked participants to send their consent electronically. Informed consent forms contain information about the confidentiality and non-disclosure of participant and organization data, participant voluntary participation, and ability to withdraw from the research at any time (Leyva-Moral & Feijoo-Cid, 2017; Thorpe, 2014). The informed consent form for this study included all these aspects. Participants could withdraw from the study by email or a phone call at any time without providing reasons or explanations.

Researchers are responsible for ensuring the confidentiality of research data and participants (Annink, 2017; Bromley et al., 2015; Leyva-Moral & Feijoo-Cid, 2017; Reed et al., 2014). Studies should not include participant information (Lokke & Sorensen, 2014). Pseudonyms comprised of alphanumeric abbreviations helped ensure participant confidentiality. Saunders et al. (2015) argued pseudonyms help researchers to distinguish between participants' interview responses for data transcription and coding. The pseudonyms representing a sample of six virtual team leaders for this study included VTL1, VTL2, VTL3, VTL4, VTL5, and VTL6. Coding also helps achieve the confidentiality and privacy of research participants (Lahman et al., 2015; Petrova, Dewing, & Camilleri, 2016). In accordance with the Walden University ethical research

protocol, I have secured participant data in a password-protected laptop as well as company documents and an audio recorder in a locked cabinet for 5 years after graduation. I plan to destroy all data in the laptop and audio recorder after 5 years.

Research incentives can be in monetary or non-monetary form. Kelly, Margolis, McCormack, LeBaron, and Chowdhury (2017) argued monetary incentives influence participation rates in qualitative studies. Additionally, Zutlevics (2016) recommended the use of financial incentive where its goal is to encourage research participation and achieve quality outcomes. Despite the importance of incentives in research, they might not always lead to their intended outcomes (Prendergast et al., 2015). Therefore, participants in this study did not receive any incentive.

Data Collection Instruments

The researcher is the primary research instrument in qualitative case studies (Hernández-Hernández & Sancho-Gil, 2015; Marshall & Rossman, 2016; Saxena, 2017). Interviews, focus groups, documents, observations, videos, existing documents, and artifacts are data collection instruments for qualitative studies (Vohra, 2014; Yin 2014). Data collection for this study used semistructured interviews with open-ended questions. Dabić and Stojanov (2014) recommended researchers should conduct interviews using open-ended questions. Company documents were another instrument for collecting data in this study. Documents triangulate data from interviews (Yin, 2017). Documents for data collection in this study included the employee handbook, code of conduct and ethics, and employee diversity policy.

Upon receiving signed interview informed consent forms, I agreed with participants on convenient times and dates to schedule interviews. Interviews assist researchers in capturing research participants' emotions, feelings, and expressions for an in-depth understanding of a study (Deakin & Wakefield 2014; Finlay, 2014; Seitz, 2016). Researchers use interview protocols to ensure uniformity in the data collection technique across participants (Ishak & Bakar, 2014). Semistructured interviews with open-ended questions in the interview protocol (see Appendix A) ensured all participants in this study answered the same number and type of questions. The interview protocol (see Appendix A) included details on what I will say before, during, and after interviews and helped guide interview sessions with each participant. McIntosh and Morse (2015) recommended semistructured telephone interviews for qualitative case studies. Hence, open-ended semistructured interview questions were appropriate for understanding strategies virtual team leaders in large corporate banks use to build trust among virtual team members. The use of semistructured interviews assists researchers to obtain data they cannot collect through structured questionnaires (McIntosh & Morse, 2015). Semistructured interviews guide researchers and participants to engage in open-ended discussions on the topic in question and allow for multiple follow-up questions and a repeat of interview questions to participants for clarifications (Saxena, 2017; Sutherland et al., 2014). Additionally, semistructured interviews afford participants freedom or flexibility in the duration used in answering open-ended research questions (McIntosh & Morse, 2015).

Documentation review was the other data collection instrument for this study. Documents serve as a source of evidence for qualitative research (Dabić & Stojanov, 2014). Researchers use documents to corroborate and complement interview data collected from participants (Leedy & Ormrod, 2014). The documentation used for this study included the employee handbook, code of conduct and ethics, and employee diversity policy. Documents contain details on events and specific references for researchers to review (Yin, 2017). Data from documents help triangulate interview data and increases the reliability and validity of participant interview data (Yin, 2017). Data triangulation, which is the validation of a study by comparing data from multiple sources, helps researchers to achieve data saturation (Graue, 2015; Tibben, 2015). Data retrieved from team documents in this study triangulated interview data to achieve data saturation.

Member checking and follow-up questions were useful in mitigating shortcomings inherent in telephone interviews and enhanced the reliability and validity of data collection instruments. Follow-up questions are essential for eliciting information and promoting people's thinking (Gilson, Little, Ruegg, & Bruce-Davis, 2014). Researchers ask follow-up questions until no innovative ideas emerge in studies (Baskarada, 2014). I asked each participant follow-up questions multiple times to obtain answers and clarifications. Using member checking allows participants to validate responses provided during interviews (Elo et al., 2014; Marshall & Rossman, 2016). After transcribing recorded interviews, research participants received electronic copies of interview transcripts with a request to review and make necessary corrections. Member checking interviews occurred after interview transcription but before data analysis. The

rationale for the occurrence of member checking before data analysis is to prevent misunderstanding of responses (Morse, Lowery, & Steury, 2015). Ensuring the accuracy and credibility of research data is the main benefit of member checking (Fusch and Ness, 2015; Morse et al., 2015). Participants received a request to attend member checking interviews for the review, confirmation, and provision of further insights to interpreted interview data. Member checking interview sessions lasted for half of an hour. A weakness of member checking is some participants might want to please researchers and accept their flawed transcriptions or interpretation of recorded interviews (Leedy & Ormrod, 2014). To mitigate this member checking weakness, Rudnick (2014) recommended a cross-case validation of findings within the sample. Cross-case validation, repeated participant feedback, and data triangulation helped enhance the reliability, credibility, and validity of research data.

Data Collection Technique

Qualitative researchers use various data collection techniques to explore research phenomena. Techniques for collecting data in qualitative research include archival records, interviews, participant observations, site visits, documents review, and physical artifacts (Hurst et al., 2015; Tellado López-Calvo, & Alonso-Olea, 2014; Yin, 2017). Yin (2014) recommended the use of at least two data collection techniques for case studies. Using multiple data collection techniques in case studies helps improve research validity (Fusch & Ness, 2015).

The data collection techniques for this study included semistructured interviews and review of company documents. Interview protocols serve as a guide for researchers

to engage research participants in open-ended discussions during interview sessions (Koch et al., 2014). The interview protocol (see Appendix A) served this purpose in the proposed study. Telephone and Skype calls were the data collection techniques for semistructured interviews in this study. The main data collection technique was a telephone interview. Skype interview was an alternative for participants with Skype accounts willing to conduct electronic interviews. However, no Skype interview occurred because all research participants requested interview by telephone.

Semistructured interviews afford participants freedom concerning the amount of time used in answering open-ended research questions (McIntosh & Morse, 2015) and allow for multiple follow-up questions and a repeat of interview questions to participants for clarifications (Sutherland et al., 2014). Semistructured interviews provide researchers the flexibility of rephrasing and changing the sequence of research questions based on data obtained from each interviewee (Saxena, 2017).

Given the nature of virtual teams wherein team members live and work in different geographical locations, telephone and Skype interviews are more convenient and comfortable because research participants do not have to travel to locations, thereby incurring no cost (Morse, 2015). Deakin and Wakefield (2014) recommended the use of alternative interview methods such as e-interviews when face-to-face interviews are impossible. Although telephone interviews are convenient, they do not afford researchers the opportunity to observe facial expressions and body language. Skype allows the interviewer to visualize interviewees during interviews and observe non-verbal

expressions but may encounter dropped calls if Internet connection is poor (Deakin & Wakefield 2014; Seitz, 2016).

I agreed with participants on convenient times to conduct interviews. Interview sessions started with my introduction and the purpose of the study. Before commencing interviews, I sought permission from each participant to audio record the interview. Audio recording does not substitute researchers' active listening (Yin, 2017). Recording interviews allow researchers to capture and include all participant responses in data analysis (Nordstrom, 2015) and to identify common themes across the collected data (Fusch & Ness, 2015). During interviews, I maintained a journal for taking notes. The journal was useful in recording participant vocal reactions and important ideas or themes identified during telephone interviews. Researchers can record reactions of participants during interviews (Moustakas, 1994). Notes taken during interviews complement interview transcripts and are useful during data analysis (Germak, & Robinson, 2014; Goh, Tan, & Lai, 2015). Taking notes using a journal was important for this study because it allowed me to capture responses to follow-up questions, corrections to interviews transcripts, and new ideas during member checking interviews.

Member checking and follow-up questions were useful in mitigating the shortcomings of telephone interviews and the absence of Skype interviews. By signing the informed consent form and before conducting interviews, participants provided their consent to participate in the member checking process. Member checking occurred after audio recording and transcription of interviews. Upon transcribing recorded interviews, I conducted member-checking interviews with each participant to review, confirm, modify,

and verify my interpretations. Through member checking, researchers validate their understanding of responses participants provided during interviews (Birt et al., 2016; Caretta, 2016; Elo et al., 2014; Harvey, 2015). Member checking accords participants the opportunity to provide new perspectives to initial interview responses (Birt et al., 2016; Marshall & Rossman, 2016). Carroll and Huxtable (2014) recommended member checking should occur until the attainment of data saturation. I conducted member checking with research participants until the emergence of no ideas.

Researchers use a secondary data collection technique to triangulate interview data for validity and data saturation (Fusch & Ness, 2015; Graue, 2015; Tibben, 2015). The other data collection technique in this study for data triangulation was review of company documents. Documentation review in qualitative research helps complement interviews (Leedy & Ormrod, 2014). Data retrieved from documentation can corroborate interview data to enhance a study's validity and reliability (Yin, 2017). The documents I reviewed for this study included the employee handbook, code of conduct and ethics, and employee diversity policy. Documents contain details on events and specific references for researchers to review (Yin, 2017) and help ensure data triangulation (Leedy & Ormrod, 2014). I requested organizational and team documentation from research participants after interview sessions. Participants provided the employee handbook, code of conduct and ethics, and employee diversity policy. Upon receiving these documents, I created a summary to compare with interview transcripts.

Data Organization Technique

Organizing data is an essential part of the data collection process. Research logs, reflective journals, and cataloging are the techniques for tracking research data. Keeping track of the research process is the primary function of research logs (Bloom & Deyrup, 2015; Fluk, 2015). The data captured in research logs assist researchers in describing and reflecting on the research process (Fluk, 2015). Research logs are a source of rich information for data analysis (Bloom & Deyrup, 2015) and could be in electronic or hard copy formats (Fluk, 2015). For this study, an electronic copy research log was useful in documenting and reflecting on the data collection process for data reliability and analysis.

Another data organization technique for qualitative research includes reflective journals. Reflective journals accord researchers rich data about research participants' beliefs and thoughts (Lindroth, 2015). Researchers in case studies use reflective journals to record and track all reflections regarding their interactions and experiences with participants during the research process (Bruno & Dell'Aversana, 2017; Narayanasamy, 2015). Lindroth (2015) recommended the use of reflective journals when conducting interviews with research participants. Creating effective reflective journals requires objectivity on the part of researchers (Cowan, 2014). Narayanasamy (2015) suggested researchers should maintain reflective journals throughout the research process. Reflective journal entries have valuable insights regarding the influence of researcher beliefs, thoughts, values, and assumptions on research results (Alley, Jackson, & Shakya, 2015). Reflections captured in these journals lead to new understandings or insights and improve researchers personally and professionally (Alley et al., 2015; Cowan, 2014;

Lindroth, 2015; Narayanasamy, 2015). Including reflective journal entries and insights in data analysis and interpretation enhances research reliability and validity (Noble & Smith, 2015). I used a reflective journal to document and track reflections of my interactions and experiences during interviews with research participants.

Cataloging was the final data organizing technique for this study. Cataloging includes labeling research data. The formatting, labeling, and categorization of transcribed interviews are essential for data analysis (Onwuegbuzie & Byers, 2014). Participant interview transcripts were in separate files in my laptop computer. Saunders et al. (2015) recommended the use of pseudonyms for participants to avoid confusion during research. The name or label of each file was identical to participant pseudonyms. Replacing participants' names with pseudonyms is important because pseudonyms help keep participants' personal information private and confidential (Lahman et al., 2015; Petrova et al., 2016). Marshall and Rossman (2014) argued storing research data in a labeled-file format and categorizing the files using identifiers assists with the differentiation of one identifier from others. Researchers import transcribed interview responses and data retrieved from team documentation into NVivo for the identification of similarities and differences as well as themes associated with this study's research question (Oliveira, Bitencourt, Zanardo dos Santos, & Teixeira, 2016). NVivo was essential for categorizing and analyzing study data. Notes taken during interviews are useful when analyzing and interpreting data (Annink, 2017). I used a labeled hard-cover journal to take notes during interviews with participants.

I stored all data in a password-protected personal computer and kept a flash drive and documents in a locked file cabinet. Only I have access to the laptop computer and locked cabinet. The backup for all research data was a flash drive. Having a backup for research data ensures data integrity in case of data loss or corruption in the secure personal laptop computer. Destruction of raw data will occur after 5 years by deleting all files in the password-protected personal computer and flash drive and shredding all documents.

Data Analysis

Data analysis involves a thorough examination and categorization of data to produce evidence-based findings (Yin, 2017). The objective of data analysis is to provide answers to the overarching research question, which explains why Yin (2014) argued alignment must exist between the research question, data collection instruments, and data analysis techniques. In qualitative research, data analysis pertains to collecting, filtering, and organizing data, and then making conclusions based on the data (Graue, 2015). Content analysis and thematic analysis were the data analysis techniques for this qualitative single case study. Content analysis is useful in identifying and categorizing emergent themes from research data (Graue, 2015). Hence, I utilized content analysis to identify themes regarding strategies virtual team leaders in large corporate banks use to build trust among virtual team members as they emerge and categorize them. Mayer (2015) argued content analysis is the preferred approach for analyzing qualitative data because of the multiple steps inherent in the data analysis process. Content analysis involves data preparation, development of codes and categories, assessment of coding,

and making conclusions on coded data (Mayer, 2015). Data preparation connotes the transcription of recorded interviews (Mayer, 2015) as well as the retrieval of relevant data from team documentation. Using themes or topics to code research data ensures the prioritization of relevant aspects for data analysis (Vaughn & Turner, 2016). Thematic analysis is a qualitative data analysis technique used for identifying and analyzing patterns and themes in collected data (Besley et al., 2016; Vaismoradi, Jones, Turunen, & Snelgrove, 2016). Thematic analysis is suitable for the examination of transcribed recorded semistructured interviews and the documentation of similarities in participants' responses (Vaismoradi et al., 2016). Therefore, thematic analysis was useful in achieving an objective examination of strategies virtual team leaders use to build trust among team members.

The data analysis process starts with a review of raw data (Crowe et al., 2015; Mayer, 2015; Yin, 2017). This involved listening to participant recorded interviews and reading interview transcripts and company documentation summaries for familiarization and conversion into codes, categories, and themes. Data analysis occurred using NVivo. NVivo is suitable for the coding and analysis of qualitative data, with the advantage of quick and faster determination of connections between themes (Oliveira et al., 2016). NVivo has features for ensuring uniformity and validity in the data analysis process and is useful in the creation of categories by dividing transcribed texts into segments for further analysis (Meyer, 2015; Patias, Bobsin, Gomes, Liszbinski, & Damke, 2016). Categories are participant views as expressly stated in transcribed texts and form the basis of theme development (Vaismoradi et al., 2016). The next step of the data analysis

process involved the construction and application of codes in the various categories using NVivo to develop themes. Researchers use themes to understand the importance or meaning of research participant words and experiences contained in interview transcripts (Vaismoradi et al., 2016). Categories and themes created in the coding process aligned with the research question. Content analysis of coded data follows theme development for the identification of recurrent themes (Leedy & Ormrod, 2014). Thematic analysis is the identification of patterns and connections between themes in coded data (Peticca-Harris et al., 2016). I used content analysis to identify recurrent themes and utilized thematic analysis to ascertain patterns. The final step in the data analysis process entailed correlating and comparing emergent themes using the study's conceptual framework and reviewed and new literature. Ribeiro Serra (2015) argued literature is the basis of research studies and assists in the analysis of research findings.

Reliability and Validity

Reliability and validity form the basis of qualitative research (Yin, 2017).

Research studies are unreliable and invalid when they fail the dependability, replicability, and accuracy tests (Basturkmen, 2014; Morse, 2015; Smith & Noble, 2015). A significant threat to research reliability and validity is bias because it negatively affects the research process as well as research findings (Bero, 2017; Roulston & Shelton, 2015; Smith & Noble, 2014; Yüksel, 2017). Malaone, Nicholl, and Tracey (2014) argued bias leads to incorrect findings and loss of validity. Bias may also cause unclear and inaccurate representations of data and findings (Toews et al., 2017). Reliability is the consistency with which the researcher uses qualitative research data to replicate previous studies and

achieve similar outcomes (Leung, 2015; Yin, 2017). Replication involves reproducing or repeating prior studies (Basturkmen, 2014). Reliability relates to researcher adherence to procedures inherent in research methods (Smith & Noble, 2015). Collecting research data by using the appropriate methods enhances reliability (Choy, 2014). Detailed descriptions of research processes relating to data collection, data analysis, and the reporting of research outcomes help ensure reliability (Elo et al., 2014). To ensure reliability for this study, I adhered to research procedures and described in detail all research processes employed. Validity is the process a researcher employs to ensure research findings are accurate, and the extent to which the researcher's conclusions on data are truthful (McKibben & Silvia, 2016; Smith & Noble, 2015). The experience and trustworthiness of researchers are important prerequisites of research validity (Marshall & Rossman, 2016). Research achieves validity when processes and procedures used in collecting and interpreting data are clear and transparent (Teusner, 2016). Demonstrating clarity and transparency with respect to research processes used and basing all research conclusions on collected data helped achieve research validity. Dependability, credibility, transferability, and conformability are important qualitative research reliability and validity elements worth considering (Cope, 2014; Li, Lee, Chen, Jeng, & Chen, 2014).

Dependability

Dependability is a key factor for conducting a reliable research. Dependability pertains to the procedures and processes used in the collection, interpretation, and analysis of research data (Bloomberg & Volpe, 2016; Yin, 2017). Reliable qualitative research studies require the use of dependable and consistent data collection processes

and procedures (Anney, 2014). The data collection processes I used in this study included semistructured interviews through telephone and the review of company documents.

Using organized research procedures assists other researchers to validate a study's results because they can follow those procedures in a systematic manner (Plamondon, Bottorff, & Cole, 2015). Documenting research processes and procedures sequentially help ensure dependability and replicability of research outcomes (Byrman & Bell, 2015; O'Brien et al., 2014). Researchers explain the data collection process in a detailed manner to achieve dependability (Bloomberg & Volpe, 2016; Charlesworth & Foëx, 2015). I described the processes for conducting interviews and reviewing documentation chronologically. The study includes a description of the process used in analyzing data collected from participants. Another method for achieving dependability is through member checking. Member checking allows research participants to review, correct, and provide additional information to their interview responses (Morse, 2015). Member checking occurs through interviews (Birt et al., 2016). Researchers use member-checking interviews to provide participants an opportunity to review the researcher's interpretation of collected data. During member checking interviews, participants review, validate, modify, or verify researchers' explanation and interpretation information collected (Birt et al 2016; Caretta, 2016; Harvey, 2015; Marshall & Rossman, 2016). Member checking and a thorough description of the data collection and analysis processes ensured this study's dependability.

Credibility

Credibility occurs when research participants believe in or agree with research outcomes (Cope, 2014). Credibility also entails ensuring the researcher's transcription and interpretation of recorded interview data align with research participants' understanding or beliefs (Bloomberg & Volpe, 2016; Yin, 2017). Member checking and triangulation helped achieve research credibility. Member checking is an interview opportunity for participants to review and confirm researchers' interpreted data (Birt et al., 2016; Morse, 2015). To maintain credibility and validity, researchers must present accurate data (Cronin, 2014). Member checking helps ensure the accuracy of data obtained from participants (Marshall & Rossman, 2016). Research data credibility is one of the benefits of member checking (Fusch and Ness, 2015; Morse et al., 2015). Therefore, I conducted member checking with research participants to ensure my interpretation and description of interview data accurately represent their experiences. Another method to ensure credibility was triangulation. Comparing interview data with data retrieved from team documents assists with the identification of trends (Leedy & Ormrod, 2014). Data triangulation is the validation of a study by comparing data from multiple sources (Carter et al., 2014; Graue, 2015; Tibben, 2015), and enhances data credibility and validity because it involves the use of multiple data collection methods (Carter et al., 2014). I used member checking and data triangulation to enhance the proposed study's credibility by demonstrating research outcomes have their basis in collected data.

Transferability

Transferability is a requirement for research validity (Bryman & Bell, 2015).

Transferability is the extent to which research findings can apply to other areas (Bengtsson, 2016). Readers ascertain the transferability of research studies by reviewing the data collection and sampling procedures used (Koch et al., 2014). The data collection strategies in this study included interview and documentation review while the sampling methods were purposeful sampling and snowball sampling. In this study, I provided a description of the procedures for sampling participants and collecting data. To ensure transferability, researchers must provide a detailed explanation or description of processes used in conducting research studies (Plamondon et al., 2015; Yin, 2017). A detailed description of processes used in conducting research studies serves as an audit trail of all decisions made (Annink, 2017) and assists other researchers to understand the basis of research studies, which may inspire them to use these processes in their research settings (Bloomberg & Volpe, 2016). The study included details on all research processes used. Researchers can enhance transferability by documenting research procedures as well as their weaknesses for other researchers to follow and achieve similar outcomes (Crowe et al., 2015; Yin, 2017). Consequently, I documented research procedures in a way other researchers or readers can easily understand and follow. Researchers provide detail descriptions of data collection processes used in studies to attain transferability (Koch et al., 2014). Providing a detail description of the data collection process, eligibility criteria, sampling method, and data analysis approach helped make the study findings transferable.

Conformability

The extent to which another researcher can corroborate research findings is confirmability (Marshall & Rossman, 2016). Confirmability pertains to whether other researchers can replicate the outcomes of a research study (Charlesworth & Foëx, 2015; Morse, 2015; Yin, 2014). Replication is the reproduction of previous studies, including their findings (Basturkmen, 2014). Examining research data thoroughly for accuracy and validity achieves confirmability (Bryman & Bell, 2015). Participants reviewed interview transcripts for confirmation of content. Using member checking with all research participants to validate research findings satisfies confirmability (Marshall & Rossman, 2016). All participants took part in the member checking process. Additionally, describing the steps used during the research process to eliminate bias ensures confirmability (Morse, 2015; Yin, 2017). I described all research procedures used in conducting the study. The rationale is bias negatively affects the research process (Bero, 2017; Smith & Noble, 2014; Yüksel, 2017). A research process fraught with bias results in incorrect findings, loss of validity, and inaccurate representation of data (Malaone et al., 2014; Toews et al., 2017). Achieving confirmability in this study entailed conducting member checking with interviewees for validation of interview transcripts and describing the research process systematically.

Data Saturation

Data saturation is essential for qualitative research validity (Fusch & Ness, 2015). Researchers achieve data saturation when no new ideas or information emerges from data collected through interviews or when themes become repetitive (Boddy, 2016; Hagaman

& Wutich, 2017; O'Brien et al., 2014; Yin, 2017). Without data saturation, a research study is incomplete (Bloomberg & Volpe, 2016; Yin, 2017). Researchers accomplish data saturation by interviewing research participants and asking follow-up questions (Baskarada, 2014). I interviewed six virtual team leaders with successful experience building trust among virtual team members and asked follow-up questions. Data saturation occurred after interviewing the sixth participant. Another approach for achieving data saturation is through data triangulation (Fusch & Ness, 2015). Data triangulation is the use of data from multiple sources to validate a study (Graue, 2015; Leedy & Ormrod, 2014; Tibben, 2015). In this study, triangulation using the employee handbook, code of conduct and ethics, and employee diversity policy also supported the achievement of data saturation. Member checking ensures the accuracy of participant answers obtained through interviews because it accords participants other opportunities to review, verify, and validate researchers' interpretation of interview responses (Caretta, 2016; Marshall & Rossman, 2016). I conducted member checking with participants for verification of interview data accuracy. Therefore, participant interviews, follow-up questions, member checking, and data triangulation with documents helped achieve data saturation in the study.

Transition and Summary

After building the foundation of this qualitative single case study in Section 1 and describing the research methods, designs, plans, and processes for conducting this study in Section 2, the focus of Section 3 will be data analysis and study findings, recommendations, and reflections. Section 1 included a background of the problem, the

problem statement, purpose statement, nature of the study, research and interview questions, conceptual framework, operational definitions, limitation, assumptions, and delimitation, and significance of the study. Review of professional and academic literature was the final part of Section 1 and its focus was on the conceptual framework, virtual teams, and trust. Section 2 components consisted of the purpose statement, role of the researcher, participants, research method and design, population and sampling, ethical research, data collection instruments, data collection techniques, data organization techniques, data analysis, and reliability and validity. Section 3 will apply research findings to professional practice, presenting research results analytically, making conclusions based on findings, discussing implications for social change, and providing suggestions for actions and future research opportunities.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative single case study was to explore strategies virtual team leaders in large corporate banks use to build trust among virtual team members. The data collection techniques were semistructured telephone interviews with virtual team leaders and review of company documents. Member checking and company documents helped triangulate and validate data collected through interviews. All research participants echoed the importance of building trust within virtual teams wherein team members live and work from different geographic locations. Five themes emerged from data analysis: reliable technology, effective communication, promotion of teamwork and participation, respect for people and culture, and barriers to trust strategies.

Presentation of the Findings

The overarching research question for this study was the following: What strategies do virtual team leaders in large corporate banks use to build trust among virtual team members? The following five themes surfaced during the data analysis process:

1. Reliable technology
2. Effective communication
3. Promotion of teamwork and participation
4. Respect for people and culture
5. Barriers to trust strategies

These themes helped reveal strategies virtual team leaders in large corporate banks use to build trust among virtual team members. For virtual teams to be performant

and productive, virtual team leaders must invest time in trust-building activities and initiatives. VTL2 stated that trust is a vital aspect for virtual team success, and a team does not exist in its absence. Additionally, the research organization's policy on employee diversity requires employees to demonstrate trust in their business partners. VTL2's response and the employee diversity policy aligned with Barnwell et al.'s (2014) finding that nurturing trust within virtual teams is one way that project managers can lead virtual teams successfully.

Theme 1: Reliable Technology

The first theme of this study is reliable technology. Without advances in information and communication technologies, there will be no virtual teams (Killingsworth et al., 2016). Four research participants mentioned technology as being quintessential for the proper functioning of virtual teams. For example, VTL1 stated that technology is always the underpinning for virtual teams and having effective and reliable technology is important. VTL2 added that technology is vital and virtual teams cannot exist without technology because team members will not be able to liaise with each other. Therefore, ensuring that virtual teams have reliable technology is a must for virtual team leaders and managers.

All participants acknowledged using several types of information and communication technologies to facilitate communication among virtual team members and build relationships and trust. Virtual teams in banks use technologies such as email, telephone, and desktop sharing (Kage, 2012). Etim and Huynh (2015) also discovered virtual team members in banks utilize SharePoint, Skype, video conference, and instant

messaging for communication and collaboration. The types of information and communication technologies participants used for team member interactions included email, phone, instant messaging (Microsoft Lync and office communicator), audio conferencing, Skype, Sharepoint, and video conferencing (WebEx). The research organization's employee handbook referenced employees' use of electronic systems such as email, telephone, computers, and the Internet to conduct business transactions. These tools are useful for building trust among global virtual team members because they use them to liaise, collaborate and communicate (Al-Ani et al., 2014). VTL4 mentioned that the most effective strategy for building trusting relationships in virtual teams with information and communication technologies is to combine the technologies.

All participants accepted using technologies in numerous ways. Information and communications tools help facilitate the development of stronger relationships among partners (Gonçalves et al., 2014; Park & Lee, 2014). Virtual teams use information and communication technologies for interactions among members through instant messaging, electronic messaging, teleconferencing, file sharing, video conferencing, and audio conferencing (Pangil & Moi Chan, 2014; Wadsworth & Blanchard, 2015). Understanding the most suitable types of information and communication technologies and their use is necessary for virtual team success (Malhotra & Majchrzak, 2014). Research participants used email and instant messaging (Microsoft Lync and office communicator) for distinct types of communications and based on the urgency of those communications. Participants revealed they use email in situations where team members are out of the office; for matters involving many team members or stakeholders; for nonurgent matters; and when

they need to share PowerPoint presentations, pictures, or other files. VTL6 pointed out that email is essential for communications because team members cannot remain on the phone all day. Unlike email, instant messaging is suitable for urgent matters or inquiries when people are in a meeting and cannot speak with others, as well as to quickly obtain team members' attention.

Telephone and SharePoint are other technologies mentioned in interview responses. Participants indicated that telephones are useful for communicating and interacting with team members for virtual team success. Participants utilized telephones for conference calls (audio conferencing) to facilitate virtual meetings and project kick-off meetings. SharePoint serves as a collaboration tool and repository for virtual teams. Participants used SharePoint for storing virtual team and project documents. This tool allows virtual team members to gain access to team or project documents from any location and at any time.

Video conferencing is technology that virtual team members use for interactions with one another, and which allows team members to view themselves (Minas et al., 2014). Participants revealed they use WebEx for video conferencing. Through laptop computers, virtual team members used WebEx to view each other and interact during team meetings. Participants said WebEx is technology that increases team members' proximity or closeness to one another in virtual teams. Virtual team leaders can use WebEx to nurture trust among team members because they can observe each other, facial expressions, and nonverbal cues. Despite the benefits of WebEx, not all participants expressed a desire to use video conferencing tools. VTL4 argued that she has been

familiar with conference calls and face-to-face meetings in which everyone is aware of his or her dressing but not virtual settings in which meeting members might view each other in informal attire such as pajamas. VTL4 disliked the idea of people observing others in informal dress.

Interview responses indicated that professional behavior influences trust in a positive manner. Within the banking industry, professional interactions among members of virtual teams positively impact virtual team performance (Olaisen & Revang, 2017). VTL4 recommended high-quality headsets during virtual meetings as the technology for demonstrating professionalism. She explained her rationale as follows:

A good headset is the equivalent of a good suit. If you want to be taken seriously and be professional, you should [ensure] that high quality sound [is] coming in on a conference call. If someone always sounds muffled or much louder or much softer than everybody else, you can be accidentally or unknowingly confusing people on a conference call. This is an interesting technology and your virtual presence is something you need to think about. And think about the impression I am giving people.

Virtual team leaders must encourage the utilization of these technologies within their teams to develop and maintain trust.

Theme 2: Effective Communication

The second theme of this study is effective communication. All participants emphasized the importance of communication within virtual teams. Failing to promote communication in virtual teams will diminish or destroy trust (Hoch & Kozlowski, 2014).

The most successful approach for building trust among virtual team members is communication (Duran & Popescu, 2014). Communication and frequent interactions are crucial for building trust among people (Hakanen & Häkkinen, 2015; Isik et al., 2015).

Interview responses revealed that 90% of virtual team members' actions are to communicate because communication helps align people's perception of the problem a virtual team is trying to solve. VTL3 said that, apart from technology, communication is key for virtual team effectiveness and strongly believed trust is communication and how team members are communicating with one another. Echoing the relevance of communication, research participants posited that any restriction to communication in virtual teams negatively impacts the establishment of trust. The organization's employee handbook mentioned the necessity of communication within virtual teams and at all organizational levels.

Participants revealed that communication is useful for virtual teams because team members better understand each other and team objectives through interactions. Lack of understanding can impede information sharing among virtual team members (Pathak, 2015). Since virtual team members are not in the same physical location, communication in virtual teams is electronic. Interview responses indicated that participants host several types of virtual meetings to improve understanding. Group or one-on-one meetings help achieve virtual team objectives (Darics, 2017). The types of meetings participants used to enhance communication, understanding, and trust among team members included kick-off meetings, recurrent conference calls, and ad hoc or planned work sessions. Participants used kick-off meetings to ensure all virtual team members comprehend

project goals and objectives. Meetings could be virtual or face to face, involving a large or small number of attendees. VTL4 said the most efficient type of virtual team meeting for effective communication and trust-building is the one with a small number of participants.

Communication plans emerged from interview responses as vital for effective communication. Creating communication rules in virtual teams and using electronic communications for interactions help build interpersonal relationships and trust (Hansen, 2016; Henderson et al., 2016; Yilmaz, 2016). Participants indicated that communication plans helped improve understanding within virtual teams. For example, VTL3 and VTL6 stated that having communication plans is a successful strategy for building trust within virtual teams because such plans help team members comprehend how and what to communicate. Virtual team leaders should exploit the use of communication rules or plans when building trust among their team members.

Interview responses revealed that electronic communications have limits in developing trust among virtual team members. Trust development and effective communication are a challenge for virtual teams (Benetytė & Jatuliavičienė, 2014; Saafein, & Shaykhian, 2014). Restricting virtual team communication to technology leads to insufficient communication, delayed responses, and misunderstandings (Magnusson et al., 2014; Smite et al., 2014). Participants recommended that virtual team leaders create opportunities for face-to-face communication or meetings. Face-to-face interactions enhance in-depth understanding between team members and allow the

observation of verbal cues (Hakanen & Häkkinen, 2015; Purvanova, 2014). Describing his face-to-face experience, VTL1 said:

I took over a project and the first few weeks were rather difficult. What I found is, we had a face-to-face meeting last week with a lot of people from the Carolinas, from Maine, Canadians. They brought people from different geographic locations. It was phenomenal to meet the people, see the faces and to talk. This brings a lot to the table because people start to feel a little bit more comfortable with each other. They understood who they were talking to rather than just a general thought. They could visualize the person they were talking to and understand them, and understand that person's modes of communication as well. That is more of an ideal way of doing it.

According to participants, communicating with people face to face abates misunderstandings. Face-to-face communications are invaluable for building trust in virtual teams because team members can observe each other's reactions, sense of urgency, and facial expressions. These observations help build rapport among virtual team members. VTL2 stated that developing trust within virtual teams is difficult without face-to-face interactions.

In situations where virtual teams cannot have frequent face-to-face interactions, participants recommended having such meetings periodically. Participant responses indicated that occasional face-to-face meetings help build and maintain trust within virtual teams. VTL5 had the opportunity to meet with his team members once. He said it was a great experience because of the social presence created during the encounter.

Despite the benefits face-to-face interactions afford virtual teams, participants were adamant that trust could develop without physical meetings. VTL6 asserted that trust could develop within teams even though virtual team members are not physically in the same location. He explained that people become comfortable and trust others when they meet and frequently talk to each other over the phone. VTL4 confirmed having respectful and trusting relationships with team members she has never met face to face and emphasized that in-person meetings are not a prerequisite for nurturing trust among virtual team members. Where there will be no opportunities for virtual team members to meet face to face, VTL2 cautioned, team members need to communicate and over communicate to compensate for misunderstandings that may occur.

Participants acknowledged communications in virtual teams have to be effective for trust to develop among team members. According to them, effective communication is when it is open, clear, and inclusive. Creating an open work environment within a team facilitates trust-building among team members (Cheng et al., 2016; Katou, 2015). Sharing information and knowledge openly among team members promotes trusting relationships (Gerbasi & Latusek, 2015). Concerning communication clarity, participant answers to interview questions indicated team or project documents and messages must be in extremely clear writings to avoid misunderstanding. Trust diminishes when communication is ambiguous. Detailed emails with confusing and irrelevant information resounded from participant responses as a deterring factor for building trust within virtual teams. A review of the employee handbook and code of conduct and ethics indicated company leaders support open channels of communication at all levels and encourage

open communication among employees and their managers. Participants also recognized the importance of communicating openly. Without open communications within virtual teams, leaders cannot comprehend the stress level of team members. Unless open communication and rapport exist within virtual teams, team members will not trust others or feel comfortable. Research participants echoed the need for inclusive communication in building trust within virtual teams. Based on interview data, virtual team leaders must involve all team members in communications to effectively build trust. Excluding team members in email communications, group meetings, and conference calls may have adverse effects on trust and hinder trust development among virtual team members.

Theme 3: Promotion of Teamwork and Participation

Promoting teamwork and participation is the third theme of this study. To successfully complete transactions, banks require both interactive and collaborative teamwork (Doeland, 2017; Lakkoju, 2014). Teamwork reoccurred in interview responses as a strategy for building trust in virtual teams. A review of interview data and company documents indicated team members' voice, knowledge sharing, team identity and emphasis, and humor were the main aspects of teamwork and participation.

Fostering participation is a skill virtual team leaders must possess to be successful (Morley, Cormican, & Folan, 2015). Participants mentioned in their role as virtual team leaders they must ensure all team members have a have a voice. To achieve this, leaders must make sure team members feel comfortable, understand their role within the team, and understand they are an essential part of the team. Virtual team members trust when they are participating in and contributing to team activities. Participants discouraged the

practice of undermining or unnecessarily criticizing team members' work because it diminishes trust and people's willingness to participate or contribute. VTL6 said failing to engage team members in project activities and discussions negatively influence trust.

Additionally, research data revealed strategies participants use in enhancing team member participation and developing trust within virtual teams. One strategy identified in interview responses for increasing the participation of quiet individuals is to accord them opportunities during meetings to provide their point of view on matters. Limiting micro-management and engaging team members in all meetings or communications are other strategies for encouraging participation. Celebrating team member accomplishments with a focus on teamwork, encouraging job-shadowing, and pairing individuals to work on activities help increase participation and nurture relationships. By using job-shadowing and pairing individuals, research participants positively reinforced an ideology of team member support, togetherness, teamwork, and participation in virtual teams.

Two participants recognized knowledge sharing as an essential element for teamwork and fostering trust among virtual team members. Knowledge sharing allows virtual team members to have a profound understanding of project tasks (Han & Beyerlein, 2016). Participant responses indicated without knowledge sharing a team does not exist because no one understands everything. Knowledge sharing is helpful in establishing trust since the more team members share and not keep to themselves, trusting relationships develop. VTL3 contended that some team members feel threatened to share their knowledge freely within virtual teams because it might result in their services not being needed anymore. Having this attitude within virtual teams could hinder the

building of trust. Virtual team leaders should create a safe work environment in which team members are not nervous or reluctant in sharing information.

Team emphasis or identification and the encouragement of a sense of belonging within virtual teams help nurture trust among team members (Chastain & Nathan-Roberts, 2016). Promoting teamwork results in trusting relationships (Pearce, 2015). The employee diversity policy referenced the importance of effective teamwork. Participants acknowledged that emphasizing teamwork and team identity are useful trust-building strategies. Establishing team names or identity, focusing on the team rather than individuals, recognizing team performance, and reminding virtual team members that they are part of a team resounded from interview responses as essential for promoting teamwork. Participants also mentioned team members must rely on one another for trust to nurture. Participant experiences with building teamwork within virtual teams included meeting every week as a team for the identification of beneficial strategies, staying in contact with team members during weekends and nights via group texts, and engaging team members in non-work related exercises such as volunteering and having lunch together. These experiences could help virtual team leaders increase the comfort level of team members to interact with one another and build trust among them.

Finally, using humor to promote teamwork, participation, and trust is another strategy identified in transcribed interview responses. Leaders may use dimensions of humor to build team identity (Høigaard, Haugen, Johansen, & Giske, 2017). Humor has the potential of positively impacting trust in teams (Robert, Dunne, & Iun, 2016). Explaining his use of humor, VTL1 stated,

Humor brings people out of their shells and some of the quieter ones will laugh. Once they sense that it is not an overly serious meeting, they will contribute and participate. I use humor and crack jokes to get the people talking and once people start talking and conversing you find that week after week of doing that there is a free-flowing meeting. Instead of the beginning that you get only a couple of people doing the main part of the meeting and decision making, you now have everyone talking. There is now a dynamic team and you get a lot more done.

Tremblay and Gibson (2016) cautioned about using humor to encourage participation because it might be counterintuitive. Constructive humor positively impacts participation and trust while non-constructive humor impacts participation and trust negatively (Tremblay & Gibson, 2016). VTL4's experience with humor is a testament to Tremblay and Gibson's (2016) findings. She revealed,

What I try to do is to say tell me your two truths and a lie. One of those kinds of ice breaker things. Those are too stupid for most people especially for virtual teams because people might be rolling their eyes. You do not know how much they are on mute laughing and mocking you.

Theme 4: Respect for People and Culture

The fourth theme of this study is respecting people and culture. A salient challenge virtual team leaders encounter is to liaise with and manage team members having different cultural backgrounds (Lilian, 2014). Respectful communications with team members as well as the willingness to embrace cultural diversity are effective strategies for building trust within virtual teams (Dumitrescu et al., 2014; Gerbasi &

Latussek, 2015; Nam, 2014; Tamer & Dereli, 2014). All participants articulated the need to respect team members and their cultures within virtual teams for trust-building purposes. This involves recognizing the diverse personalities, backgrounds, and cultures of team members and respecting them. Ridiculing or yelling at virtual team members who ask or answer questions, speaking condescendingly about people, and talking about team members behind their back are behaviors virtual team leaders must avoid because they hinder trust development within virtual teams. Participants mentioned trust develops when team members feel accepted irrespective of their cultural beliefs and the virtual team is void of hostility and disrespect.

A recurrent practice participants alluded to in virtual teams is when team members take advantage of the virtual nature of such teams to be rude and disrespectful to others. Individuals treat others in horrible ways while interacting with them electronically. VTL4 stated some people feel the virtuality of dispersed teams accords them permission to forget the fact that human beings exist behind keyboards. Virtual team leaders must take necessary steps to avoid such a practice because it negatively affects trust.

Key aspects related to cultural differences identified in participant responses, which may affect trust within virtual teams include accent, language barrier, and holidays. Participants revealed cultural differences are more prevalent in global companies with virtual teams composed of team members from around the world. The ability of virtual team members to speak multiple languages helps develop trust among them (Dumitrescu et al., 2014; Han & Beyerlein, 2016). However, addressing diverse

languages in virtual teams is a difficulty for team leaders (Han & Beyerlein, 2016; Paul et al., 2016). Participants acknowledged the existence of language barrier in virtual teams. They stated language barrier causes verbal or written misunderstandings within teams and makes some virtual team members to be extremely quiet, only providing yes or no answers to questions.

Additionally, research participants echoed the challenges accent presents to virtual team leaders and members. According to VTL1 and VTL3, accent is the way in which people speak. Team members with different cultural backgrounds possess different accents. Accent presents difficulties for team members in comprehending one another. Participants agreed that informing team members with an accent that they are not understanding him or her is a challenging task. Interview data revealed continuously asking team members to repeat what they said could make them feel embarrassed and uncomfortable. Strategies virtual team leaders could use to overcome challenges emanating from language barrier and accent resounded from interview responses. One of them included listening carefully to team members to understand what they are saying without interrupting or challenging them. The second strategy was to try and understand team members' backgrounds and aspects within their country. The final strategy was to paraphrase or pretend to have trouble with the phone and ask the team member to clarify.

Comprehending team members' religious, cultural, and national holidays and respecting them is an important skill a virtual team leader must possess to build trust in a global virtual team setting. Participants recounted their experiences with holidays and the consequences of not paying attention to them. VTL2 said accommodating team members'

religious, cultural, and national holidays is extremely challenging especially when these holidays occur around a similar time frame because it could delay the completion of project activities. VTL4 explained her experience with not understanding and respecting team members' holiday:

I had a test organization in India and they had told me that they had an unscheduled holiday for voting and I said well we have got to get this deadline, we are really far behind. We just have to make this happen. I know it is a holiday but they have to work. What I did not understand is a holiday for voting in the area meant rioting may be occurring. And these people actually came in and worked on a day when it was really dangerous to be on the streets. I was very ashamed of myself when I later discovered it. This is an extreme version of the consequences of not understanding and missing the cues that are on a virtual team.

Participants recommended virtual team leaders should always be respectful and accommodate team members' holidays.

Participants shared their experiences with cultural differences in virtual teams, stating these experiences could have a bearing on trust formation among members. When dealing with team members from different national and cultural backgrounds, participants recommended virtual team leaders should use open-ended questions and dialogue to elicit information. Open-ended questions and dialogue help ensure virtual team leaders obtain accurate project information from team members and avert potential delays. Another experience identified in interview data relates to cultures or societies wherein people do

not value the opinion of women as much as that of men or cultures in which women are not used to speaking up. These cultures impede team member participation and trust development. VTL2 that admitted replacing proponents of such cultures within his teams. A final experience recounted in interview responses pertains to cultures wherein team members cannot respectfully argue with their leaders but must follow directions or instructions. VTL4 argued that this type of culture does not promote participation within teams, and virtual team leaders must encourage team members to proffer their arguments.

Company documents corroborated participant interview responses. A review of the employee handbook, code of conduct and ethics, and employee diversity policy revealed the research organization requires all employees to respect individuals and treat them with dignity, demonstrate courtesy and respect for the needs of other employees, and foster an inclusive culture. Employees must also communicate respectfully, responsibly, and professionally, and work well with people from different cultural and national backgrounds.

Theme 5: Barriers to Trust Strategies

A theme that continuously resounded across all participant responses was barriers to trust strategies. In other words, these are obstacles participants encountered in their role as virtual team leaders while implementing trust-building strategies. Four important barriers emerged from data analysis: cost, differences in time zones, communications via email and instant messaging, and unavailability of team members. In the ensuing paragraphs, I discuss each of these barriers.

The first barrier to trust-building strategies in virtual teams related to cost.

Although cost savings or reduction is the main reason virtual teams are proliferating (Etim & Huynh, 2015; Tetteh & Okantey, 2016), five participants identified the high cost of bringing team members in one location for face-to-face interactions and trust development as a major prohibitive factor. Bringing people in one location is expensive and involves paying for their transportation, accommodation, and feeding. Participants admitted they are always willing to arrange for face-to-face meetings but organizational policies preclude them because of budgetary constraints. Virtual team size impacts the cost of organizing face-to-face work sessions. The larger the number of people in a virtual team, the higher the overall cost. For example, VTL6 had a total of 140 people on his last project. He determined that bringing this large number of people to a single location for a meeting is impossible. These utterances align with Kirkman et al. (2016) who discovered face-to-face meetings and interactions are costly and therefore rarely occur.

The second barrier to trust-building strategies within virtual teams pertained to differences in team members' time zones. Differences in time zones are a source of conflicts and problems in virtual teams (Keefe et al., 2016). Four research participants revealed challenges they encountered in building trust because of time differences. Where team members live in geographical locations with a time difference of 10 to 12 hours, participants admitted scheduling team meetings is extremely difficult. With such a difference in time zone, some team members will not be available at certain times, or if available, they will have to work longer hours in a day. VTL2 said having team members

work long hours is exhausting and leads to the wear and tear of the team. Delayed email responses and the absence of live interactions among virtual team members emerged from interviews as trust-building obstacles associated with differences in time zones.

The third barrier to trust-building strategies related to the use of email and instant messaging to build trust. Email and instant messaging are useful tools for virtual team leaders to promote interactions between team members and build trusting relationships (Saafain & Shaykhian, 2014). Three participants expressed concerns about the ability of these information and communication technologies in effectively building trust in virtual teams. Although most organizations use email for interactions, it is ineffective (Aritz, Walker, & Cardon, 2018). Resounding from research interviews, email was the least effective strategy for building teams and trust within virtual teams because team members are either not reading or partially reading them. VTL4 said the following about email:

If all you are doing is having email conversations, that will destroy trust. If you want to figure out a way to destroy trust just sending emails to the team would be a great way to develop distrust. I would say email, I try to keep them to very simple questions

Concerning instant messaging, participants thought this technology would be effective in developing trust within virtual teams, but it has been the contrary. VTL6 explained his disappointment in instant messaging as follows:

First, it is often used by people to circumvent the time required to send an email and wait for a response, regardless of the urgency. So, when I see this type of activity it does not engender trust. Rather, it makes me feel like that person might

be just lazy. Some things do require immediacy and using messaging is very important to engendering trust and moving a project along. However, 99% of what I see on instant messaging is not that sort. Secondly, it is the professionalism aspect of instant messaging. Most of the time the person messaging doesn't ask me if this is a good time to message or even if I'm busy. It is completely unprofessional, in my opinion. I would say this has really soured me on using instant messaging as a good method for team building.

The fourth barrier to trust strategies included the unavailability of virtual team members to engage in interactive team activities. Three participants revealed this aspect as common in virtual teams though not peculiar to them, but could be counterintuitive to the development of trust among virtual team members. Participants indicated team members are unavailable because they are always concurrently working on multiple projects. Lack of focus and communication shortfalls are direct consequences of assigning virtual team members to many different projects. Developing trust and understanding within virtual teams is impossible if team members lack complete focus.

Relating Findings to Conceptual Framework and Literature

The interpersonal trust theory was the conceptual framework for this study. The basis of the theory is managers can build trusting relationships with employees using cognition-based trust and affect-based trust (McAllister, 1995). Cognition-based trust and affect-based trust attributes are essential for building trust among team members. Cognition-based trust attributes team leaders use to build trust include competence, benevolence, integrity, reliability, and dependency (McAllister, 1995; Wang et al., 2016)

while affect-based trust attributes include confidence, emotion, and reciprocity (Wang et al., 2016). The theory holds that cognition trust is the basis of interpersonal trust in the early stage of a team, whereas the basis of interpersonal trust in the later stage of the team affective trust (McAllister, 1995).

Comprehending strategies virtual team leaders use to nurture trust among team members can help increase performance and productivity in organizations. Aspects in virtual teams that enhance cognition-based trust attributes include frequent communication, communication of work progress, being responsive, punctual to meetings, communication of team objectives, trust conversations within the team, and paying attention to everyone (Kauffmann & Carmi, 2014; Nam, 2014). Encouraging team members' participation, keeping promises, promoting knowledge sharing, managing conflicts, and recognizing team members' diligent work also enhance cognition trust (Kauffmann & Carmi, 2014; Nam, 2014). Icebreaker games, virtual social meetings, social interactions, interest in team members' personal lives, and opportunities for face-to-face meetings are affect-based trust factors (Kauffmann & Carmi, 2014).

Cognition-based trust and affect-based trust elements identified in participant responses and company documents included respect, ability, integrity, reciprocity, care, confidence, emotion, social interactions, dependability, reliability, benevolence, and concern. Additionally, the five themes identified in this study - reliable technology, effective communication, promote teamwork and participation, respect for people and culture, and barriers to trust strategies - align with the factors Kauffmann and Carmi (2014) and Nam (2014) discovered enhance cognition-based trust and affect-based trust

within virtual teams. These findings revealed a tie to the conceptual framework.

However, concerning the two-stage approach for developing interpersonal trust, only one participant indicated he used different strategies for building trust in the early stage and later stage of team formation. VTL6 and VTL2 eloquently described their contrasting approaches to using trust-building strategies. Aligning with the two-stage approach of the interpersonal trust theory, VTL6 explained,

What I like to do as a project manager is even though we are not in the same location at the start of a project or any endeavor we are doing here, I like to get as many people on the phone for a conference call to kick-off the project. I also like to have people introduce themselves, where they work from, what their skill set is, may be tell something a little personal about themselves during these initial calls. Then I think the other part of this just comes with time. I guess the more time you spend with individuals on the phone, conference calls and doing troubleshooting sessions, I think that actually helps build trust within the teams.

Contrary to the interpersonal trust theory's two-stage approach for building trust, VTL2 acknowledged using the same set of strategies throughout the existence of virtual teams. He stated the following: "I used these strategies throughout the life of the team. At the beginning it is particularly important, throughout the life of the team it is important and at the end it is important."

Other key aspects of study findings that relate to new and existing literature on virtual teams and trust included knowledge sharing, communication, culture, technology, respect for people, and teamwork. Participants mentioned knowledge sharing is necessary

for teamwork and the nurturing trust among virtual team members. Establishing knowledge sharing practices in virtual teams enhances performance and the accomplishment of project objectives (Mukherjee & Natrajan, 2017). Engaging and obtaining the commitment of team members positively influences knowledge sharing and business productivity (Buvik & Tvedt, 2017; Mukherjee & Natrajan, 2017).

Effective communication emerged from study findings as essential for building trust among virtual team members. Cleary (2018) discovered virtual team members encountered difficulties in communicating at the beginning of project initiatives. Effective communication is extremely important for the smooth functioning of organizational teams (Darics, 2017). Virtual team members communicate electronically but having face-face meetings makes communication or interactions among team members more effective (Sox, Kline, Crews, Strick, & Campbell, 2017). Additionally, having communication standards facilitates collaboration among team members (Mukherjee & Natrajan, 2017).

Interview data and company documents referenced respect for others and their cultures as useful for creating healthy work environments and developing trust. Leaders of virtual teams who treat people with respect are successful and achieve project outcomes (Mukherjee & Natrajan, 2017). Cultural differences within teams increase as they become virtual or global (Killingsworth et al., 2016). An increase in conflicts among team members is the consequence of having diverse cultures in virtual teams (Magnusson et al., 2014). Virtual team leaders must respect cultures and pay close attention to diversity for the prevention and resolution of conflicts (Lilian, 2014).

Teamwork surfaced as a major prerequisite for trust in virtual teams. Participants argued having a team name fosters teamwork and togetherness. Darics (2017) revealed the creation of team identity and mission is necessary for effective virtual team work. To successfully complete transactions within organizations teamwork must exist between employees (Doeland, 2017; Lakkoju, 2014). Technology forms the basis of virtual teams because without it team members will not interact. Telephone, instant messaging, email, and audio and video conferencing are tools virtual members use for communications and trust-building interactions (Mukherjee & Natrajan, 2017). The selection of appropriate technology for virtual teams should be part of their overall organizational strategy (Mukherjee & Natrajan, 2017). Given the proliferation of information and communication technologies, leaders must understand how they function for proper use (Sox et al., 2017).

The above aspects from research findings align with new and existing literature. The only two exceptions related to instant messaging and social media. Literature revealed instant messaging is an effective information and communication technology for collaboration within virtual teams and trust development among team members (Darics, 2017; Smith, Patmos, & Pitts, 2018). Study findings partially align with this conclusion. Participant responses indicated that albeit instant messaging serves as an important tool for synchronous interactions among team members, its overuse in organizations may have unprofessional and disrespectful implications, negatively impacting trust. Several types of social media exist, but participants acknowledged using only Skype sparingly for team member interactions and trust development. In addition to Skype, new and existing

literature revealed Facebook, Google Hangout, blogs, wikis, Twitter, Google+, LinkedIn as social media for successful virtual team collaboration (Jones & Graham, 2015; Smith et al., 2018; Wadsworth & Blanchard, 2015).

Applications to Professional Practice

This study is important in understanding strategies for building trust within virtual teams. Trust is crucial for virtual team success and knowledge sharing among team members. (Chang et al., 2014; Derven, 2016). Virtual team members have trouble working together because of the dispersed nature of such teams (Lilian, 2014). Managing teams with people from diverse cultural and national backgrounds expose leaders to unique trust-building challenges (Collins et al., 2017; Han & Beyerlein, 2016). The findings of this study represent successful experiences of participants in their role as virtual team leaders. Study findings could serve as a guide for organizations wanting to adopt virtual teams for the conduct of business. Organizations already using virtual teams to execute projects can develop training based on the results of this study to improve the skills of team leaders and the overall performance of their teams. Training virtual team members on how to communicate professionally and communicate across cultures lead to improved performance and productivity (Cleary, Slattery, Flammia, & Minacori, 2018).

Research findings revealed diverse types of information and communication technologies exist, and virtual team leaders use them for various purposes. Existing or new virtual team leaders could use these technologies to build trusting relationships among team members for cohesive, performant, and productive teams. Choosing suitable communication tools helps improve team coordination, a challenging aspect in virtual

teams, which is necessary for effective collaboration and the facilitation of work processes (Aritz et al., 2018; Cleary et al., 2018; Flammia, Cleary, Slattery, 2016). Haines (2014) discovered leaders of virtual teams need strategies to overcome challenges encountered in managing team members. Applying study findings could help virtual team leaders improve overall organizational performance.

Respect for people and culture was an important outcome in this study. Virtual team leaders must interact cordially with team members from other cultures to build trusting relationships (Fan et al., 2014; Lilian, 2014; Mukherjee & Natrajan, 2017) because trust is essential for virtual team success (De Jong et al., 2016). Cleary et al. (2018) concluded having in-depth knowledge in intercultural communication or interaction abates challenges virtual team leaders encounter. Therefore, by instituting and effectively implementing policies that promote diverse cultures and respect in the workplace, organizations could experience improved work environments with greater productivity.

One of the main prerequisites for completing tasks successfully in virtual teams is trust (Peñarroja et al., 2015; Yao, et al., 2015). Study findings indicated teamwork and participation help nurture trust. Fostering a work environment wherein team members collaborate and share information positively influences virtual team performance and project success (Mukherjee & Natrajan, 2017). Virtual team leaders of large corporate banks could achieve project, team, or organizational objectives by ensuring team members are contributing and working as a team.

Finally, virtual team members liaise using face-to-face and electronic communication to effectively build trust. Using multiple forms of communication in virtual teams abates feelings of isolation, increases rapport, improves team member support, and increases job satisfaction (Smith et al., 2018). By investing in multiple communication channels within virtual teams, organizations could benefit from decreased team member or employee turnover and increased savings.

Implications for Social Change

Implications for social change abound if virtual team leaders choose to implement effective strategies identified in this study for building trust among virtual team members. Some positive implications include fair, equitable, ethical, honest, open, respectful, professional, and culturally inclusive work environments. As research findings revealed, various strategies exist for building trust within virtual teams. These strategies include choosing reliable technology, encouraging effective communication, promoting team member participation, and ensuring virtual team members demonstrate respect towards each other as well as their cultural backgrounds. Positive implications for social change in adopting these strategies may include a complete transformation of the way in which virtual team leaders communicate or interact with team members, perceive others, appreciate cultural diversity, and use technology.

Face-to-face interactions within virtual teams are scarce (Kirkman et al., 2016). Increasing social presence to nurture trust among team members in virtual teams is more challenging to accomplish than in collocated teams (Kohonen-Aho & Alin, 2015). Another implication for positive social change includes the potential for virtual team

leaders to use effective trust-building strategies to increase social presence in virtual teams. Virtual team members feel isolated because of geographical disparity (El-Sofany et al., 2014). Increasing social presence could lead to the creation of improved work environments for virtual team members who live at different geographic locations. By improving the work environment, employers can promote the overall mental and physical health and wellbeing of employees beyond the workplace (Wyatt et al., 2015).

Recommendations for Action

Recommendations of this study are for organizational leaders and virtual team leaders. A review of interview data and company documents indicated building trust among virtual team members is at the core of virtual team success and effectiveness and a key responsibility of virtual team leaders. Organizational leaders and virtual team leaders of large corporate banks should compare their policies with the themes revealed in this study and make revisions where necessary to incorporate the results. For example, VTL6 stated, “I will say a change in policy on how instant messaging is used in my organization could possibly change my mind, but at this point I do not think it is an effective form of team building over geographically disperse teams.” If these organizations do not have policies in place, organizational leaders should consider adopting the strategies identified in this study for building trust among virtual team members. Upon adopting the strategies, virtual team leaders must implement them to realize the benefits.

To successfully build trust within virtual teams, virtual team leaders should communicate respectfully, professionally, and courteously, treat others with dignity, embrace cultural diversity, promote cultural awareness with their teams, encourage an

inclusive culture, recognize and reward team members for outstanding performance, and encourage knowledge sharing. Having an excellent understanding of the diverse types of information and communication technologies, choosing the right technology, and using it appropriately to promote effective communication and build trust within virtual teams are imperative for virtual team leaders. Organizational leaders should ensure virtual teams have reliable technology for interactions.

Virtual team members should endeavor to create a comfortable work environment with a friendly atmosphere, establish teamwork, avoid micro-managing, design communication plans and rules, avoid miscommunication, and create frequent or periodic face-to-face opportunities for social interactions to nurture trusting relationships among team members. Given the importance of face-to-face interactions, organizational leaders should provide virtual team leaders with the resources needed to organize these sessions. Organizational leaders should also assess the trust-building skills of virtual team leaders using the themes of this study and fill any gaps with formal training.

The findings of this study could be useful to virtual team leaders and organizational leaders of large corporate banks. I intend to share the outcomes of this study with the research organization and all research participants. I will publish the study in various academic and business journals. Training sessions, workshops, and conferences are also suitable for presenting and publicizing the results of this study.

Recommendations for Further Research

There exist areas for further research concerning effective strategies for building trust in virtual teams. I identified various limitations of this study in Section 1, including

small sample size, using a single organization for the research, restricted geographic location, participants' unwillingness to participate in Skype interviews, and focusing the study solely on virtual team leaders. One recommendation is to use a larger sample of virtual team leaders to obtain more insights on the topic. Another strongly recommended aspect for further study is to include more than one organization. Using a multiple case study will provide additional perspectives regarding effective strategies for building trust in virtual teams. Conducting this study using other data collection techniques like Skype or focus groups could yield different but important outcomes. An avenue for further research is to conduct a case study or multiple case study involving both virtual team members and leaders. Utilizing an alternative research method such as quantitative research may reveal new cause and effect relationships. A future research opportunity may include using the phenomenological research design with virtual team leaders from various industries to have a broader perspective about effective strategies for building trust in virtual teams. Restricting the geographic location of a study limits the generalizability of findings (Yin, 2017). Further research should include a larger geographic area of the United States. This research did not include the day-to-day process of managing virtual teams. A future study will include managing the virtual team process for holding employees accountable. Finally, basing this study on an alternative conceptual framework such as swift trust theory or the communication theory could reveal useful strategies for building trust with virtual teams.

Reflections

The doctoral degree process is a tough, challenging, but exciting one. My expectations about the Doctor of Business Administration program before starting it were completely different from what I discovered while in the program. I realized the program is demanding and time-consuming. I had to adjust my lifestyle and forgo most of my leisure to be successful. My life changed completely, and my friends and family members complained. Work, school, and family challenges made me question if pursuing a doctoral degree at that time of my life was the right decision. To make matters worse, unknown people tragically shot and killed my brother who was a professor at a university in the Republic of South Africa. Despite these challenges, I kept working diligently because of my penchant for success. As the first in my family to study at this level, I also thought my late brother and father, mother, siblings, spouse, children, and friends will be proud observing me complete this terminal degree.

I have learned and gained much from this process. I now possess a profound understanding of effective strategies virtual team leaders can use to build trust among virtual team members. I feel blessed having such a knowledgeable doctoral committee assigned to my study. All the corrections and feedback my committee members provided improved my study as well as my knowledge. I hope and pray to impact the lives of my future students or anyone who needs my assistance. Throughout the data analysis process, I remained aware of my biases and focused solely on interview data and company documents. The target population of my study was five participants, but I interviewed a total of six participants because data saturation occurred after the sixth interview. My

study participants were knowledgeable and possessed the required experience on the topic. Although, I encountered challenges finding convenient times for research interviews with them because of their busy schedules, they were always willing to take part in this study and respond to any questions I asked. These helped improve the quality of my study.

Conclusion

Trust is vital in teams for performance and productivity, regardless of whether team members are virtual or in the same location. Building trust in virtual teams is more challenging than in collocated teams because virtual team members live in different geographic locations with limited or no face-to-face meetings. The purpose of this study was to explore effective strategies virtual team leaders of large corporate banks use to build trust among virtual team members. Findings revealed virtual team leaders have a key role regarding effectively developing trust within virtual teams.

Five themes emerged from the data analysis process as strategies virtual leaders use to nurture trusting relationships among virtual team members for improved productivity. The themes include: reliable technology; effective communication; promote teamwork and participation; respect for people and culture; and barriers to trust strategies. Therefore, by selecting reliable technology, effectively communicating, promoting teamwork and participation, respecting people and their cultures, and addressing barriers to trust strategies, virtual team leaders could successfully build trust within their teams and enhance organizational performance. For virtual team leaders to be successful in this endeavor, organizational leaders must provide all the support they need.

This might entail purchasing reliable technology and enacting policies that enhance the trust building function of virtual team leaders.

References

- Al-Ani, B., Marczak, S., Redmiles, D., & Prikladnicki, R. (2014). Facilitating contagion trust through tools in Global Systems Engineering teams. *Information and Software Technology*, 56, 309-320. doi:10.1016/j.infsof.2013.11.001
- Alley, S., Jackson, S. F., & Shakya, Y. B. (2015). Reflexivity: A methodological tool in the knowledge translation process. *Health promotion practice*, 16, 426-431. doi:10.1177/1524839914568344
- Alonso-Díaz, L., & Yuste-Tosina, R. (2015). Constructing a grounded theory of e-learning assessment. *Journal of Educational Computing Research*, 53, 315-344. doi:10.1177/0735633115597868
- Alsharo, M., Gregg, D., & Ramirez, R. (2017). Virtual team effectiveness: The role of knowledge sharing and trust. *Information & Management*, 54, 479-490. doi:10.1016/j.im.2016.10.005
- Amsteus, M. N. (2014). The validity of divergent grounded theory method. *International Journal of Qualitative Methods*, 13, 71-87. doi:10.1177/160940691401300133
- Anney, V. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5, 272-281. Retrieved from <http://jeteraps.scholarlinkresearch.com>
- Annink, A. (2017). Using the research journal during qualitative data collection in a cross-cultural context. *Entrepreneurship Research Journal*, 7, 1-17. doi:10.1515/erj-2015-0063
- Arcia, A. (2014). Facebook advertisements for inexpensive participant recruitment

among women in early pregnancy. *Health Education & Behavior*, 41, 237-241.

doi:10.1177/1090198113504414

Aritz, J., Walker, R., & Cardon, P. W. (2018). Media use in virtual teams of varying levels of coordination. *Business and Professional Communication Quarterly*, 81, 222-243. doi:10.1177/2329490617723114

Avolio, B. J., Sosik, J. J., Kahai, S. S., & Baker, B. (2014). E-leadership: Re-examining transformations in leadership source and transmission. *The Leadership Quarterly*, 25, 105-131. doi:10.1016/j.leaqua.2013.11.003

Baek, Y. M., & Jung, C. S. (2015). Focusing the mediating role of institutional trust: How does interpersonal trust promote organizational commitment? *The Social Science Journal*, 52, 481-489. doi:10.1016/j.soscij.2014.10.005

Barnwell, D., Nedrick, S., Rudolph, E., Sesay, M., & Wellen, W. (2014). Leadership of international and virtual project teams. *International Journal of Global Business*, 7(2), 1-8. Retrieved from <http://www.gsmi-ijgb.com/Pages/IJGBV7N.aspx>

Baskarada, S. (2014). Qualitative case study guidelines. *Qualitative Report*, 19, 1-18. Retrieved from <http://tqr.nova.edu/>

Basturkmen, H. (2014). Replication research in comparative genre analysis in English for academic purposes. *Language Teaching*, 47, 377-386. doi:10.1017/S0261444814000081

Bella, G. (2014). Inductive study of confidentiality: For everyone. *Formal Aspects of Computing*, 26, 3-36. doi:10.1007/s00165-012-0246-3

Benetytė, D., & Jatuliavičienė, G. (2014). Building and sustaining trust in virtual teams

- within organizational context. *Regional Formation and Development Studies*, 10, 18-30. doi:10.15181/rfds.v10i2.138
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *Nursing Plus Open*, 2, 8-14. doi:10.1016/j.npls.2016.01.001
- Bero, L. (2017). Addressing bias and conflict of interest among biomedical researchers. *The Journal of the American Medical Association*, 317, 1723-1724. Retrieved from jamanetwork.com/pdffaccess.ashx?url.
- Besley, J. C., Dudo, A. D., Yuan, S., & Abi Ghannam, N. (2016). Qualitative interviews with science communication trainers about communication objectives and goals. *Science Communication*, 38, 356-381. doi:10.1177/1075547016645640
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26, 1802-1811. doi:10.1177/1049732316654870
- Bloom, B., & Deyrup, M. M. (2015). The SHU research logs: Student online search behaviors trans-scripted. *The Journal of Academic Librarianship*, 41, 593-601. doi:10.1016/j.acalib.2015.07.002
- Bloomberg, L. D., & Volpe, M. (2016). *Completing your qualitative dissertation: A road map from beginning to end* (3rd ed.). Thousand Oaks, CA: Sage.
- Boddy, C. R. (2016). Sample size for qualitative research. *Qualitative Market Research: An International Journal*, 19, 426-432. doi:10.1108/QMR-06-2016-0053
- Boies, K., Fiset, J., & Gill, H. (2015). Communication and trust are key: Unlocking the relationship between leadership and team performance and creativity. *The*

Leadership Quarterly, 26, 1080-1094. doi:10.1016/j.leaqua.2015.07.007

Bonet Fernandez, D. B., & Jawadi, N. (2015). Virtual R&D project teams: From E-leadership to performance. *Journal of Applied Business Research*, 31, 1693-1708. doi:10.19030/jabr.v31i5.9384

Bonnefon, J. F., Hopfensitz, A., & De Neys, W. (2017). Can we detect cooperators by looking at their face? *Current Directions in Psychological Science*, 26, 276-281. doi:10.1177/0963721417693352

Brañas, A., Barrigón, M. L., Garrido-Torres, N., Perona-Garcelán, S., Rodriguez-Testal, J. F., Lahera, G., & Ruiz-Veguilla, M. (2016). U-shaped curve of psychosis according to cannabis use: New evidence from a snowball sample. *Journal of Psychopharmacology*, 30, 1331-1338. doi:10.1177/0269881116660712

Brewer, P. E., Mitchell, A., Sanders, R., Wallace, P., & Wood, D. D. (2015). Teaching and learning in cross-disciplinary virtual teams. *IEEE Transactions on Professional Communication*, 58, 208-229. 10.1109/TPC.2015.2429973

Bromley, E., Mikesell, L., Jones, F., & Khodyakov, D. (2015). Framing health matters. From subject to participant: Ethics and the evolving role of community in health research. *American Journal of Public Health*, 105, 900-908. doi:10.2105/AJPH.2014.302403

Bruce, A., Beuthin, R., Shields, L., Molzahn, A., & Schick-Makaroff, K. (2016). Narrative research evolving: Evolving through narrative research. *International Journal of Qualitative Methods*, 15, 1-6. doi:10.1177/1609406916659292

Bruno, A., & Dell'Aversana, G. (2017). Reflective practice for psychology students: The

- use of reflective journal feedback in higher education. *Psychology Learning & Teaching*, 16, 248-260. doi:10.1177/1475725716686288
- Bryman, A., & Bell, E. (2015). *Business research methods*. New York, NY: Oxford University Press.
- Bungay, V., Oliffe, J., & Atchison, C. (2016). Addressing underrepresentation in sex work research: Reflections on designing a purposeful sampling strategy. *Qualitative Health Research*, 26, 966-978. doi:10.1177/1049732315613042
- Buvik, M. P., & Tvedt, S. D. (2017). The influence of project commitment and team commitment on the relationship between trust and knowledge sharing in project teams. *Project Management Journal*. 48, 5-21. doi:10.1177/875697281704800202
- Buvik, M. P., & Rolfsen, M. (2015). Prior ties and trust development in project teams - A case study from the construction industry. *International Journal of Project Management*, 33, 1484-1494. doi.org/10.1016/j.ijproman.2015.06.002
- Calefato, F., Lanubile, F., & Novielli, N. (2015). The role of social media in affective trust building in customer–supplier relationships. *Electronic Commerce Research*, 15, 453-482. doi:10.1007/s10660-015-9194-3
- Caretta, M. A. (2016). Member checking: A feminist participatory analysis of the use of preliminary results pamphlets in cross-cultural, cross-language research. *Qualitative Research*, 16, 305-318. doi:10.1177/1468794115606495
- Carroll, W., & Huxtable, D. (2014). Expose / oppose / propose: The Canadian centre for policy alternatives and the challenge of alternative knowledge. *Labour / Le*

Travail, 74, 27-50. Retrieved from <http://muse.jhu.edu>

- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41, 545-547. doi:10.1188/14.onf.545-547
- Chae, S. W. (2016). Perceived Proximity and Trust Network on Creative Performance in Virtual Collaboration Environment, *Procedia Computer Science*, 91, 807-812, doi:10.1016/j.procs.2016.07.084
- Chai, J. C. Y., Malhotra, N. K., & Alpert, F. (2015). A two-dimensional model of trust–value–loyalty in service relationships. *Journal of Retailing and Consumer Services*, 26, 23-31. doi:10.1016/j.jretconser.2015.05.005
- Chai, J. Y., & Dibb, S. (2014). How consumer acculturation influences interpersonal trust. *Journal of Marketing Management*, 30, 60-89. doi:10.1080/0267257X.2013.803140
- Chan, Z. C. Y., Chan, Y., Yu, H., Law, Y., Woo, W., & Lam, C. (2014). An ethnographical study on the academic experiences of Chinese male nursing students. *Nurse Education in Practice*, 14, 130-136. doi:10.1016/j.nepr.2013.08.009
- Chang, H. H., Hung, C., & Hsieh, H. (2014). Virtual teams: Cultural adaptation, communication quality, and interpersonal trust. *Total Quality Management & Business Excellence*, 25, 1318-1335. doi:10.1080/14783363.2012.704274
- Charlesworth, M., & Foëx, B. A. (2015). Qualitative research in critical care: Has its time finally come? *Journal of the Intensive Care Society*. 17, 146-153.

doi:10.1177/1751143715609955

- Charlier, S. D., Stewart, G. L., Greco, L. M., & Reeves, C. J. (2016). Emergent leadership in virtual teams: A multilevel investigation of individual communication and team dispersion antecedents. *The Leadership Quarterly*, 27, 745-764. doi:10.1016/j.leaqua.2016.05.002
- Chastain, J. W., & Nathan-Roberts, D. (2016). Recommendations for virtual teamwork based on human factors research. *Human Factors and Ergonomics Society Annual Meeting Proceedings*, 60, 1193-1197. doi:10.1177/1541931213601279
- Chatfield, A. T., Shlemoon, V. N., Redublado, W., & Darbyshire, G. (2014). Creating value through virtual teams: A current literature review. *Australasian Journal of Information Systems*, 18, 257-269. doi:10.3127/ajis.v18i3.1104
- Chen, X. P., Eberly, M. B., Chiang, T. J., Farh, J. L., & Cheng, B. S. (2014). Affective trust in Chinese leaders linking paternalistic leadership to employee performance. *Journal of Management*, 40, 796-819. doi:10.1177/0149206311410604
- Chen, Y. H., Lin, T. P., & Yen, D. C. (2014). How to facilitate inter-organizational knowledge sharing: The impact of trust. *Information & Management*, 51, 568-578. doi:10.1016/j.im.2014.03.007
- Cheng, X., Yin, G., Azadegan, A., & Kolfshoten, G. (2016). Trust evolvement in hybrid team collaboration: A longitudinal case study. *Group Decision and Negotiation*, 25, 267-288. doi:10.1007/s10726-015-9442-x
- Chereni, A. (2014). Positionality and collaboration during fieldwork: Insights from research with co-nationals living abroad. *Forum: Qualitative Social Research*, 15,

- 11-32. Retrieved from <http://www.qualitative-research.net/index.php/fqs>
- Choi, B. K., Moon, H. K., & Nae, E. Y. (2014). Cognition- and affect-based trust and feedback-seeking behavior: The roles of value, cost, and goal orientations. *Journal of Psychology, 148*, 603-620. doi:10.1080/00223980.2013.818928
- Chong, C. W., & Besharati, J. (2014). Challenges of knowledge sharing in the petrochemical industry. *Knowledge Management & E-Learning, 6*, 171–187. Retrieved from <http://www.kmel-journal.org/ojs/index.php/online-publication/index>
- Choy, L. T. (2014). The strengths and weaknesses of research methodology: Comparison and complimentary between qualitative and quantitative approaches. *IOSR Journal of Humanities and Social Science, 19*, 99-104. Retrieved from <http://www.iosrjournals.org>
- Chrupala-Pniak, M., Grabowski, D., & Sulimowska-Formowicz, M. (2016). The value of trust in inter-organizational relations. *Economics and Business Review, 2*, 127-143. doi:10.18559/ebr.2016.2.8
- Cleary, Y., Slattery, D. M., Flammia, M., & Minacori, P. (2018). Developing strategies for success in a cross-disciplinary global virtual team project: Collaboration among student writers and translators. *Journal of Technical Writing and Communication*. Advance online publication. doi:10.1177/0047281618775908
- Coenen, M., & Kok, R. A. W (2014). Workplace flexibility and new product development performance: The role of telework and flexible work schedules. *European Management Journal, 32*, 564-576, doi:10.1016/j.emj.2013.12.003

- Colfax, R. S., Santos, A. T., & Diego, J. (2009). Virtual leadership: A green possibility in critical times but can it work? *Journal of International Business Research*, 8, 133-139. Retrieved from <http://www.jibs.net/>
- Collins, N., Chou, Y. M., Warner, M., & Rowley, C. (2017). Human factors in East Asian virtual teamwork: A comparative study of Indonesia, Taiwan and Vietnam. *The International Journal of Human Resource Management*, 28, 1475-1498.
doi:10.1080/09585192.2015.1089064
- Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, 41, 89-91. doi:10.1188/14.ONF.89-91
- Corby, D., Taggart, L., & Cousins, W. (2015). People with intellectual disability and human science research: A systematic review of phenomenological studies using interviews for data collection. *Research in Developmental Disabilities*, 47, 451–465. doi:10.1016/j.ridd.2015.09.001
- Cowan, J. (2014). Noteworthy matters for attention in reflective journal writing. *Active Learning in Higher Education*, 15, 53-64. doi:10.1177/1469787413514647
- Crisp, C. B., & Jarvenpaa, S. L. (2015). Swift trust in global virtual teams. *Journal of Personnel Psychology*, 12, 45-56. doi:10.1027/1866-5888/a000075
- Cronin, C. (2014). Using case study research as a rigorous form of inquiry. *Nurse Researcher*, 21, 19-27. doi:10.7748/nr.21.5.19.e1240
- Crowe, M., Inder, M., & Porter, R. (2015). Conducting qualitative research in mental health: Thematic and content analyses. *Australian & New Zealand Journal of Psychiatry*. 49, 616-623. doi:10.1177/0004867415582053

- Curnin, S., Owen, C., Paton, D., Trist, C., & Parsons, D. (2015). Role clarity, swift trust and multi-agency coordination. *Journal of Contingencies and Crisis Management*, 23, 29-35. doi:10.1111/1468-5973.12072
- Darics, E. (2017). E-Leadership or “How to be boss in instant messaging?” The role of nonverbal communication. *International Journal of Business Communication*. Advance online publication. doi:10.1177/2329488416685068
- David Schoorman, F., Mayer, R. C., & Davis, J. H. (2016). Empowerment in veterinary clinics: The role of trust in delegation. *Journal of Trust Research*, 6, 76-90. doi:10.1080/21515581.2016.1153479
- De Jong, B. A., Dirks, K. T., & Gillespie, N. (2016). Trust and team performance: A meta-analysis of main effects, moderators, and covariates. *Journal of Applied Psychology*, 101, 1134-1150. doi:10.1037/apl0000110
- De Paoli, D., & Ropo, A. (2015). Open plan offices – The response to leadership challenges of virtual project work? *Journal of Corporate Real Estate*, 17, 63-74. doi:10.1108/JCRE-08-2014-0020
- Deakin, H., & Wakefield, K. (2014). Skype interviewing: Reflections of two PhD researchers. *Qualitative research*, 14, 603-616. doi:10.1177/1468794113488126
- Derven, M. (2016). Four drivers to enhance global virtual teams. *Industrial and Commercial Training*, 48, 1-8. doi:10.1108/ICT-08-2015-0056
- Ding, Z., Ng, F., & Li, J. (2014). A parallel multiple mediator model of knowledge sharing in architectural design project teams. *International Journal of Project Management*, 32, 54-65. doi.org/10.1016/j.ijproman.2013.04.004

- Doeland, M. (2017). Collaboration and the sharing of information help reduce payment transactions fraud. *Journal of Payments Strategy & Systems*, 11, 81-85. Retrieved from <https://www.henrystewartpublications.com/jpss>
- Douglas, A., Lubbe, B., & Fabris-Rotelli, I. (2013). Travelling or technology? Business factors influencing management decisions. *South African Journal of Economic and Management Sciences*, 16, 279-297. Retrieved from <http://www.sajems.org>
- Dowell, D., Morrison, M., & Heffernan, T. (2015). The changing importance of affective trust and cognitive trust across the relationship lifecycle: A study of business-to-business relationships. *Industrial Marketing Management*, 44, 119 -130.
doi:10.1016/j.indmarman.2014.10.016
- Drabble, L., Trocki, K. F., Salcedo, B., Walker, P. C., & Korcha, R. A. (2015). Conducting qualitative interviews by telephone: Lessons learned from a study of alcohol use among sexual minority and heterosexual women. *Qualitative Social Work*, 15, 118-133. doi:10.1177/1473325015585613
- Drescher, G., & Garbers, Y. (2016). Shared leadership and commonality: A policy-capturing study. *Leadership Quarterly*, 27, 200-217.
doi:10.1016/j.leaqua.2016.02.002
- Dumitrescu, C. I., Lie, I. R., & Dobrescu, R. M. (2014). Leading multicultural teams. *FAIMA Business & Management Journal*, 2, 43-54. Retrieved from <http://www.faimajournal.ro/archive.html>
- Duran, V., & Popescu, A. (2014). The challenge of multicultural communication in virtual teams, *Procedia - Social and Behavioral Sciences*, 109, 365-369.

doi:10.1016/j.sbspro.2013.12.473

Ebert, C., Kuhrmann, M., & Prikladnicki, R. (2016). Global software engineering: An industry perspective. *IEEE Software*, 33, 105-108. doi:10.1109/MS.2016.27

Ebrahim, N. A. (2015). Virtual R&D teams: A new model for product development. *International Journal of Innovation*, 3, 1-27. doi:105585/iji.v3i2.43

Ebrahim, N. A., Ahmed, S., & Taha, Z. (2009). Virtual teams: A literature review. *Australian Journal of Basic and Applied Sciences*, 3, 2653-2669. Retrieved from <http://oaji.net/journal-detail.html?number=464>

El-Sofany, H., Alwadani, H., & Alwadani, A. (2014). Managing virtual team work in IT projects: Survey. *International Journal of Advanced Corporate Learning*, 7, 28-33. doi:10.3991/ijac.v7i4.4018

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *Sage Open*, 4, 1-10. doi:10.1177/2158244014522633

Enosh, G., & Ben-Ari, A. (2016). Reflexivity: The creation of liminal spaces—Researchers, participants, and research encounters. *Qualitative Health Research*, 26, 578-584. doi:10.1177/1049732315587878

Etim, A. S., & Huynh, K. (2015). The use of social media and collaborative tools for virtual teaming - A global market reach out by Navibank. *International Journal of Management & Information Systems*, 19, 1-6. Retrieved from <https://www.cluteinstitute.com/ojs/index.php/IJMIS>

Eubanks, D. L., Palanski, M., Olabisi, J., Joinson, A., & Dove, J. (2016). Team dynamics

- in virtual, partially distributed teams: Optimal role fulfillment. *Computers in Human Behavior*, 61, 556-568. doi:10.1016/j.chb.2016.03.035
- Ewing, L., Caulfield, F., Read, A., & Rhodes, G. (2015). Perceived trustworthiness of faces drives trust behaviour in children. *Developmental Science*, 18, 327-334. doi:10.1111/desc.12218
- Fan, K., Chen, Y., Wang, C., & Chen, M. (2014). E-leadership effectiveness in virtual teams: Motivating language perspective. *Industrial Management & Data Systems*, 114, 421-437. doi:10.1108/IMDS-07-2013-0294
- Farmer, H., McKay, R., & Tsakiris, M. (2014). Trust in me: Trustworthy others are seen as more physically similar to the self. *Psychological science*, 25, 290-292. doi:10.1177/0956797613494852
- Finlay, L. (2014). Engaging phenomenological analysis. *Qualitative Research in Psychology*, 11, 121-141. doi:10.1080/14780887.2013.807899
- Flammia, M., Cleary, Y., Slattery, D. M. (2016). *Virtual teams in higher education: A handbook for students and teachers*. Charlotte, NC: Information Age Publishing.
- Fluk, L. R. (2015). Foregrounding the research log in information literacy instruction. *The Journal of Academic Librarianship*, 41, 488-498. doi:10.1016/j.acalib.2015.06.010
- Ford, R. C., Piccolo, R. F., & Ford, L. R. (2016). Strategies for building effective virtual teams: Trust is key, *Business Horizons*, 60, 24-35. doi:10.1016/j.bushor.2016.08.009
- Foster, M. K., Abbey, A., Callow, M. A., Zu, X., & Wilbon, A. D. (2015). Rethinking

virtuality and its impact on teams. *Small Group Research*, 46, 267–299.

doi:10.1177/1046496415573795

Frazier, M. L., Gooty, J., Little, L. M., & Nelson, D. L. (2015). Employee attachment: Implications for supervisor trustworthiness and trust. *Journal of Business and Psychology*, 30, 373–386. doi:10.1007/s10869-014-9367-4

Fujiura, G. T. (2015). Perspectives on the publication of qualitative research. *Intellectual and Developmental Disabilities*, 53, 323–328. doi:10.1352/1934-9556-53.5.323

Fusch, P., & Ness, L. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20, 1408–1416. Retrieved from <http://nsuworks.nova.edu/tqr/>

Gao, S., Guo, Y., Chen, J., & Li, L. (2016). Factors affecting the performance of knowledge collaboration in virtual team based on capital appreciation. *Information Technology and Management*, 17, 119–131. doi:10.1007/s10799-015-0248-y

Geist, K., & Hitchcock, J. H. (2014). Single case design studies in music therapy: Resurrecting experimental evidence in small group and individual music therapy clinical settings. *Journal of Music Therapy*, 51, 293–309. doi:10.1093/jmt/thu032

Gentles, S. J., Charles, C., Ploeg, J., & McKibbin, K. (2015). Sampling in qualitative research: insights from an overview of the methods literature. *The Qualitative Report*, 20, 1772–1789. Retrieved from <http://nsuworks.nova.edu/tqr/vol20/iss11/5>

Gerbas, A., & Latusek, D. (2015). Trust-building in international business ventures.

Baltic Journal of Management, 10, 30-51. doi:10.1108/BJM-04-2013-0056

Germain, M., & McGuire, D. (2014). The Role of Swift Trust in Virtual Teams and Implications for Human Resource Development. *Advances In Developing Human Resources*, 16, 356-370. doi:10.1177/1523422314532097

Germak, A. J., & Robinson, J. A. (2014). Exploring the motivation of nascent social entrepreneurs. *Journal of Social Entrepreneurship*, 5, 5-21. doi:10.1080/19420676.2013.820781

Ghobadi, S. (2015). What drives knowledge sharing in software development teams: A literature review and classification framework. *Information & Management*, 52, 82-97. doi.org/10.1016/j.im.2014.10.008

Ghobadi, S., & Mathiassen, L. (2016). Perceived barriers to effective knowledge sharing in agile software teams. *Information Systems Journal*, 26(2), 95-125. doi:10.1111/isj.12053

Gibson, C. B., Huang, L., Kirkman, B. L., & Shapiro, D. L. (2014). Where global and virtual meet: The value of examining the intersection of these elements in twenty-first-century teams. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 217-244. doi:10.1146/annurev-orgpsych-031413-091240

Gilson, C. M., Little, C. A., Ruegg, A. N., & Bruce-Davis, M. (2014). An investigation of elementary teachers' use of follow-up questions for students at different reading levels. *Journal of Advanced Academics*, 25, 101-128. doi:10.1177/1932202X14532257

- Gilson, L. L., Maynard, M. T., Young, N. C. J., Vartiainen, M., & Hakonen, M. (2015). Virtual teams research: 10 years, 10 themes, and 10 opportunities. *Journal of Management*, *41*, 1313–1337. doi:10.1177/0149206314559946
- Goh, S. K., & Sandhu, M. S. (2014). The influence of trust on knowledge donating and collecting: An examination of Malaysian universities. *International Education Studies*, *7*, 125-136. doi:10.5539/ies.v7n2p125
- Goh, Y. M., Tan, S., & Lai, K. C. (2015). Learning from the Bhopal disaster to improve process safety management in Singapore. *Process Safety and Environmental Protection*, *97*, 102-108. doi:10.1016/j.psep.2015.02.004
- Gonçalves, P., Ferreira, L., Gonçalves, J., Putnik, G. D., & Cruz-Cunha, M. M. (2014). Direct communication versus virtual communication in virtual teams. *Procedia Technology*, *16*, 3-10. doi:10.1016/j.protcy.2014.10.062
- Grabner-Kräuter, S., & Bitter, S. (2015). Trust in online social networks: A multifaceted perspective. *Forum for social economics* *44*, 48-68. doi:10.1080/07360932.2013.781517
- Graham, C. M., Daniel, H., & Doore, B. (2015). Millennial leadership: The oppositional relationship between leadership type and the quality of database system's development in virtual environments. *International Journal of e-Collaboration*, *11*, 29-48. doi:10.4018/ijec.2015070103
- Grant, A. (2017). I don't want you sitting next to me the macro, meso, and micro of gaining and maintaining access to government organizations during ethnographic fieldwork. *International Journal of Qualitative Methods*, *16*, 1-11.

doi:10.1177/1609406917712394

- Graue, C. (2015). Qualitative data analysis. *International Journal of Sales, Retailing & Marketing*, 4, 5-14. Retrieved from <http://www.ijssrm.com/ijssrm/Home.html>
- Green, D. D., & Roberts, G. E. (2010). Personnel implications of public sector virtual organizations. *Public Personnel Management*, 29, 47-57. Retrieved from <http://www.ipma-hr.org>
- Grichnik, D., Brinckmann, J., Singh, L., & Manigart, S. (2014). Beyond environmental scarcity: Human and social capital as driving forces of bootstrapping activities. *Journal of Business Venturing*, 29, 310-326. doi:10.1016/j.jbusvent.2013.02.006
- Guillemin, M., Gillam, L., Barnard, E., Stewart, P., Walker, H., & Rosenthal, D. (2016). We're checking them out: Indigenous and non-indigenous research participants' accounts of deciding to be involved in research. *International Journal for Equity in Health*, 15(8), 1-10. doi:10.1186/s12939-016-0301-4
- Guinot, J., Chiva, R., & Roca-Puig, V. (2014). Interpersonal trust, stress and satisfaction at work: An empirical study. *Personnel Review*, 43, 96-115. doi:10.1108/PR-02-2012-0043
- Ha, H. Y., John, J., John, J. D., & Chung, Y. K. (2016). Temporal effects of information from social networks on online behavior: The role of cognitive and affective trust. *Internet Research*, 26, 213-235. doi:10.1108/IntR-03-2014-0084
- Hagaman, A. K., & Wutich, A. (2017). How many interviews are enough to identify metathemes in multisited and cross-cultural research? Another perspective on Guest, Bunce, and Johnson's (2006) landmark study. *Field Methods*, 29, 23-41.

doi:10.1177/1525822X16640447

Haines, R. (2014). Group development in virtual teams: An experimental reexamination.

Computers in Human Behavior, 39, 213-222. doi:10.1016/j.chb.2014.07.019

Hakanen, M., & Häkkinen, M. (2015). Management possibilities for interpersonal trust in

a business network case: Health, exercise and wellbeing markets. *Nordic Journal*

of Business, 64, 249-265. Retrieved from <http://njb.fi>

Han, S. J., & Beyerlein, M. (2016). Framing the effects of multinational cultural diversity

on virtual team processes. *Small Group Research*, 47, 351-383.

doi.org/10.1177/1046496416653480

Hansen, D. E. (2016). Cohesion in online student teams versus traditional teams. *Journal*

of Marketing Education, 38, 37-46. doi:10.1177/0273475315594463

Harvey, L. (2015). Beyond member-checking: A dialogic approach to the research

interview. *International Journal of Research & Method in Education*, 38, 23-38.

doi:10.1080/1743727X.2014.914487

Hashim, K. F., & Tan, F. B. (2015). The mediating role of trust and commitment on

members' continuous knowledge sharing intention: A commitment-trust theory

perspective. *International Journal of Information Management*, 35, 145-151.

doi:10.1016/j.ijinfomgt.2014.11.001

Henderson, L. S., Stackman, R. W., & Lindekilde, R. (2016). The centrality of

communication norm alignment, role clarity, and trust in global project teams.

International Journal of Project Management, 34, 1717-1730.

doi:10.1016/j.ijproman.2016.09.012

- Hernández-Hernández, F., & Sancho-Gil, J. M. (2015). A learning process within an education research group: an approach to learning qualitative research methods. *International Journal of Social Research Methodology*, 18, 651-667.
doi:10.1080/13645579.2015.1049468
- Ho, S. M., & Benbasat, I. (2014). Dyadic attribution model: A mechanism to assess trustworthiness in virtual organizations. *Journal of the Association for Information Science and Technology*, 65, 1555-1576. doi:10.1002/asi.23074
- Hoch, J. E., & Kozlowski, S. J. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, 99, 390-403. doi:10.1037/a0030264
- Hoegl, M., & Muethel, M. (2016). Enabling shared leadership in virtual project teams: A practitioners' guide. *Project Management Journal*, 47, 7-12.
doi:10.1002/pmj.21564
- Høigaard, R., Haugen, T., Johansen, B. T., & Giske, R. (2017). Team identity in youth soccer: The role of coaches' feedback patterns and use of humour. *International Journal of Sports Science & Coaching*, 12, 697-707.
doi:10.1177/1747954117738843
- Hosseini, M. R., Chileshe, N., Zuo, J., & Baroudi, B. (2015). Adopting global virtual engineering teams in AEC Projects. *Construction Innovation*, 15, 151-179.
doi:10.1108/CI-12-2013-0058
- Howard-Payne, L. (2016). Glaser or Strauss? Considerations for selecting a grounded theory study. *South African Journal of Psychology*, 46, 50-62.

doi:10.1177/0081246315593071

- Hsu, M., & Chang, C. (2014). Examining interpersonal trust as a facilitator and uncertainty as an inhibitor of intra-organisational knowledge sharing. *Information Systems Journal*, 24, 119-142. doi:10.1111/isj.12000
- Hung, S. Y., Lai, H. M., & Chou, Y. C. (2015). Knowledge-sharing intention in professional virtual communities: A comparison between posters and lurkers. *Journal of the Association for Information Science and Technology*, 66, 2494-2510. doi:10.1002/asi.23339
- Hurst, S., Arulogun, O. S., Owolabi, M. O., Akinyemi, R., Uvere, E., Warth, S., & Ovbiagele, B. (2015). Pretesting qualitative data collection procedures to facilitate methodological adherence and team building in Nigeria. *International Journal of Qualitative Methods*, 14, 53-64. doi:10.1177/160940691501400106
- Hyett, N., Kenny, A., & Dickson-Swift, V. (2014). Methodology or method? A critical review of qualitative case study reports. *International Journal of Qualitative Studies on Health and Well-Being*, 9, 1-12. doi:10.3402/qhw.v9.23606
- Ishak, N. M., & Bakar, A. Y. A. (2014). Developing sampling frame for case study: Challenges and conditions. *World Journal of Education*, 4, 29-35. doi:10.5430/wje.v4n3p29
- Isik, M., Timuroglu, M. K., & Aliyev, Y. (2015). The relationship between teamwork and organizational trust. *International Journal of Research in Business and Social Science*, 4, 133-149. doi:10.20525/ijrbs.v4i1.34
- Jain, K. K., Sandhu, M. S., & Goh, S. K. (2015). Organizational climate, trust and

- knowledge sharing: Insights from Malaysia. *Journal of Asia Business Studies*, 9, 54-77. doi:10.1108/JABS-07-2013-0040
- Jarvenpaa, S. L., & Leidner, D. E. (1999). Communication and trust in global virtual teams. *Organization Science*, 10, 791– 815. Retrieved from <http://pubsonline.informs.org/journal/orse>
- Jiang, L., & Probst, T. M. (2015). Do your employees (collectively) trust you? The importance of trust climate beyond individual trust. *Scandinavian Journal of Management*, 31, 526-535. doi:10.1016/j.scaman.2015.09.003
- Jiang, X., Flores, H. R., Leelawong, R., & Manz, C. C. (2016). The effect of team empowerment on team performance: a cross-cultural perspective on the mediating roles of knowledge sharing and intra-group conflict. *International Journal of Conflict Management*, 27, 62-87. doi:10.1108/IJCMA-07-2014-0048
- Johnson, J. S. (2015). Broadening the application of mixed methods in sales research. *Journal of Personal Selling & Sales Management*, 35, 334-345. doi:10.1080/08853134.2015.1016953
- Johnson, M. (2015). Engaging a multigenerational and multicultural workforce: One style does not suit all. *Plans & Trusts*, 33, 10-15. Retrieved from <https://www.ifebp.org/>
- Jones, N. B., & Graham, C. M. (2015). Virtual teams in business and distance education: Reflections from an MBA class. *Journal of Business & Economic Policy*, 2, 49-59. Retrieved from <http://www.jbepnet.com>
- Jones, N. N. (2016). Narrative inquiry in human-centered design: Examining silence and

- voice to promote social justice in design scenarios. *Journal of technical writing and communication*, 46, 471-492. doi:10.1177/0047281616653489
- Judkins-Cohn, T. M., Kielwasser-Withrow, K., Owen, M., & Ward, J. (2014). Ethical principles of informed consent: Exploring nurses' dual role of care provider and researcher. *The Journal of Continuing Education in Nursing*, 45, 35-42. doi:10.3928/00220124-20131223-03
- Kage, A. (2012). Prerequisites for creating efficient virtual teams in banking industry. *journal of Business Management*, 5, 98-111. Retrieved from <http://www.jointphd.eu/journal/journal.html>
- Kahlke, R. M. (2014). Generic qualitative approaches: Pitfalls and benefits of methodological mixology. *International Journal of Qualitative Methods*, 13, 37-52. doi:10.1177/160940691401300119
- Katou, A. A. (2015). Transformational leadership and organisational performance: Three serially mediating mechanisms. *Employee Relations*, 37, 329-353. doi:10.1108/ER-05-2014-0056
- Kauffmann, D., & Carmi, G. (2014). How team leaders can use ICT to improve trust among virtual teams to increase collaboration? *International Journal of Engineering and Innovative Technology*, 3, 204-220. Retrieved from <http://www.ijeit.com>
- Keefe, A. M., Lang, D., Rumsey, C., & True, S. (2016). Cross-cultural virtual teaming: An exploratory approach. *Calitatea*, 17, 83-102. Retrieved from http://www.srac.ro/calitatea/en/arhiva_supplements.html

- Kelly, B., Margolis, M., McCormack, L., LeBaron, P. A., & Chowdhury, D. (2017). What affects people's willingness to participate in qualitative research? An experimental comparison of five incentives. *Field Methods*, 29, 333-350. doi:10.1177/1525822X17698958
- Kharouf, H., J. Lund, D., & Sekhon, H. (2014). Building trust by signaling trustworthiness in service retail. *Journal of Services Marketing*, 28, 361-373. doi:10.1108/JSM-01-2013-0005
- Killingsworth, B., Xue, Y., & Liu, Y. (2016). Factors influencing knowledge sharing among global virtual teams. *Team Performance Management*, 22, 284-300. doi:10.1108/TPM-10-2015-0042
- Kimble, C. (2011). Building effective virtual teams: How to overcome the problems of trust and identity in virtual teams. *Global Business and Organizational Excellence*, 30, 6-15. doi:10.1002/joe.20364
- Kirkman, B. L., Shapiro, D. L., Lu, S., & McGurrin, D. P. (2016). Culture and teams. *Current Opinion in Psychology*, 8, 137-142. doi:10.1016/j.copsyc.2015.12.001
- Klitmøller, A., Schneider, S. C., & Jonsen, K. (2015). Speaking of global virtual teams: Language differences, social categorization and media choice. *Personnel Review*, 44, 270-285. doi:10.1108/PR-11-2013-0205
- Koch, L. C., Niesz, T., & McCarthy, H. (2014). Understanding and reporting qualitative research: An analytical review and recommendations for submitting authors. *Rehabilitation Counseling Bulletin*, 57, 131-143. doi:10.1177/0034355213502549
- Kohonen-Aho, L., & Alin, P. (2015). Introducing a video-based strategy for theorizing

- social presence emergence in 3D virtual environments. *Presence: Teleoperators & Virtual Environments*, 24, 113-131. doi:10.1162/PRES_a_00222
- Kong, D. T., Dirks, K. T., & Ferrin, D. L. (2014). Interpersonal trust within negotiations: Meta-analytic evidence, critical contingencies, and directions for future research. *Academy of Management Journal*, 57, 1235-1255.
doi.org/10.5465/amj.2012.0461
- Kowal, S. P., Bubela, T., & Jardine, C. (2017). Experiences in broker-facilitated participatory cross-cultural research: Overcoming practical and ethical challenges. *International Journal of Qualitative Methods*, 16, 1-9.
doi:10.1177/1609406917706883
- Kral, M. J. (2014). The relational motif in participatory qualitative research. *Qualitative Inquiry*, 20, 144-150. doi:10.1177/1077800413510871
- Krumm, S. Kanthak, J., Hartmann, K., & Hertel, G. (2016) What does it take to be a virtual team player? The knowledge, skills, abilities, and other characteristics required in virtual teams. *Human Performance*, 29, 123-142.
doi:10.1080/08959285.2016.1154061
- Kukenberger, M. R., Mathieu, J. E., & Ruddy, T. (2015). A cross-level test of empowerment and process influences on members' informal learning and team commitment. *Journal of Management*, 41, 987-1016.
doi:10.1177/0149206312443559
- Kuo, E. W., & Thompson, L. F. (2014). The influence of disposition and social ties on trust in new virtual teammates. *Computers in Human Behavior*, 37, 41-48.

doi:1016/j.chb.2014.04.030

LaBrosse, M. (2008). Managing virtual teams. *Employment Relations Today*, 35, 81-86.

doi:10.1002/ert.20205

Lahman, M. K., Rodriguez, K. L., Moses, L., Griffin, K. M., Mendoza, B. M., & Yacoub, W. (2015). A rose by any other name is still a rose? Problematizing pseudonyms

in research. *Qualitative Inquiry*, 21, 445-453. doi:10.1177/1077800415572391

Lai, C., Singh, B., Alshwer, A. A., & Shaffer, M. A. (2014). Building and leveraging interpersonal trust within and across MNE subsidiaries: A social exchange perspective. *Journal of International Management*, 20, 312-326.

doi:10.1016/j.intman.2014.02.001

Lakkoju, S. (2014). HRD climate in Indian banks: A comparison between SBI & KVB.

Indian Journal of Industrial Relations, 50, 280-292. Retrieved from

<https://www.questia.com/library/p408596/indian-journal-of-industrial-relations>

Lapointe, É., Vandenberghe, C., & Boudrias, J. S. (2014). Organizational socialization tactics and newcomer adjustment: The mediating role of role clarity and

affect-based trust relationships. *Journal of occupational and organizational psychology*, 87, 599-624. doi:10.1111/joop.12065

Latusek-Jurczak, D., & Prystupa-Rządca, K. (2014). Collaboration and trust-building in open innovation community. *Journal of Economics & Management*, 17, 47-62.

Retrieved from <http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-51885100-d63e-49cd-8c01-f2d0f0f8a479>

Lauring, J., & Klitmøller, A. (2015). Corporate language-based communication

- avoidance in MNCs: A multi-sited ethnography approach. *Journal of World Business*, 50, 46-55. doi:10.1016/j.jwb.2014.01.005
- Leach, V., Redwood, S., Lasseter, G., Walther, A., Reid, C., Blazeby, J., . . . Donovan, J. (2016). Research participation registers can increase opportunities for patients and the public to participate in health services research. *Journal of Health Services Research & Policy*, 21, 183-187. doi:10.1177/1355819615625699
- Leedy, P. D., & Ormrod, J. E., (2014). *Practical research: planning and design*. New Jersey: Pearson Prentice Hall.
- Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, 4, 324-327. doi:10.4103/2249-4863.161306
- Lewis, S. (2015). Qualitative inquiry and research design: Choosing among five approaches. *Health Promotion Practice*, 16, 473-475. doi:10.1177/1524839915580941
- Leyva-Moral, J. M., & Feijoo-Cid, M. (2017). Participants' safety versus confidentiality: A case study of HIV research. *Nursing Ethics*, 24, 376-380. doi:10.1177/0969733016669865
- Li, I-C., Lee, S-Y. D., Chen, C-Y., Jeng, Y-Q., & Chen, Y-C. (2014). Facilitators and barriers to effective smoking cessation: Counseling services for inpatients from nurse-counselors' perspectives - A qualitative study. *International Journal of Environmental Research and Public Health*, 11, 4782-4798. doi:10.3390/ijerph110504782

- Liao, C. (2017). Leadership in virtual teams: A multilevel perspective. *Human Resource Management Review*. Advance online publication.
doi:10.1016/j.hrmr.2016.12.010
- Lilian, S. C. (2014). Virtual teams: Opportunities and challenges for e-leaders. *Procedia - Social and Behavioral Sciences*, 110, 1251-1261.
doi:10.1016/j.sbspro.2013.12.972
- Lin, X., & Leung, K. (2014). What signals does procedural justice climate convey? The roles of group status, and organizational benevolence and integrity. *Journal of Organizational Behavior*, 35, 464-488. doi:10.1002/job.1899
- Lindeblad, P. A., Voytenko, Y., Mont, O., & Arnfalk, P. (2016). Organisational effects of virtual meetings. *Journal of Cleaner Production*, 123, 113-123.
doi:10.1016/j.jclepro.2015.08.058
- Lindroth, J. T. (2015). Reflective journals: A review of the literature. *Update: Applications of Research in Music Education*, 34, 66-72.
doi:10.1177/8755123314548046
- Lipnack, J., & Stamps, J. (1999). Virtual teams: The new way to work. *Strategy & Leadership*, 27, 14-19. doi:10.1108/eb054625
- Lips-Wiersma, M., & Mills, A. J. (2014). Understanding the basic assumptions about human nature in workplace spirituality beyond the critical versus positive divide. *Journal of Management Inquiry*, 23, 148-161. doi:10.1177/1056492613501227
- Liu, J., Rau, P. L. P., & Wendler, N. (2015). Trust and online information-sharing in close relationships: a cross-cultural perspective. *Behaviour & Information*

- Technology*, 34, 363-374. doi:10.1080/0144929X.2014.937458
- Lokke, A., & Sorensen, P. D. (2014). Theory testing using case studies. *Electronic Journal of Business Research Methods*, 12, 66-74. Retrieved from <http://www.ejbrm.com>
- Luo, Q., & Zhang, H. (2016). Building interpersonal trust in a travel-related virtual community: A case study on a Guangzhou couch surfing community. *Tourism Management*, 54, 107-121. doi:10.1016/j.tourman.2015.10.003
- Lusher, D., Kremer, P., & Robins, G. (2014). Cooperative and competitive structures of trust relations in teams. *Small group research*, 45, 3-36. doi:10.1177/1046496413510362
- Mach, M., & Baruch, Y. (2015). Team performance in cross cultural project teams: The moderated mediation role of consensus, heterogeneity, faultlines and trust. *Cross Cultural Management*, 22, 464-486. doi.org/10.1108/CCM-10-2014-0114
- Mach, M., & Lvina, E. (2016). When trust in the leader matters: The moderated-mediation model of team performance and trust. *Journal of Applied Sport Psychology*. Advance online publication. doi:10.1080/10413200.2016.1196765
- Magnusson, P., Schuster, A., & Taras, V. (2014). A process-based explanation of the psychic distance paradox: Evidence from global virtual teams. *Management International Review*, 54, 283-306. doi:10.1007/s11575-014-0208-5
- Mahfoud, Z., Ghandour, L., Ghandour, B., Mokdad, A. H., & Sibai, A. M. (2015). Cell phone and face-to-face interview responses in population-based surveys: How do they compare? *Field methods*, 27, 39-54. doi:10.1177/1525822X14540084

- Malhotra, A., & Majchrzak, A. (2014). Enhancing performance of geographically distributed teams through targeted use of information and communication technologies. *Human Relations*, 67, 389-411. doi:10.1177/0018726713495284
- Malone, H., Nicholl, H., & Tracey, C. (2014). Awareness and minimisation of systematic bias in research. *British Journal of Nursing*, 23, 279-282. Retrieved from <https://info.britishjournalofnursing.com>
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: guided by information power. *Qualitative Health Research*, 26, 1753-1760. doi:10.1177/1049732315617444
- Mannay, D., & Morgan, M. (2015). Doing ethnography or applying a qualitative technique? Reflections from the 'waiting field'. *Qualitative Research*, 15, 166-182. doi:10.1177/1468794113517391
- Marinescu, P., Toma, G., & Ștefan, C. (2015). Leadership for the virtual age. *Ovidius University Annals, Series Economic Sciences*, 15, 283-286. Retrieved from <https://ideas.repec.org/s/ovi/oviste.html>.
- Marshall, C., & Rossman, G. (2014). *Designing qualitative research*. Thousand Oaks, CA: Sage.
- Marshall, C., & Rossman, G. (2016). *Designing qualitative research*. Thousand Oaks, CA: Sage.
- Matchim, Y., & Kongsuwan, W. (2015). Thai nursing students' experiences when attending real life situations involving cardiac life support: A Phenomenological study. *Nurse Education Today*, 35, 1186-1191. doi:10.1016/j.nedt.2015.05.010

- Maxwell, A. L., & Lévesque, M. (2014). Trustworthiness: A critical ingredient for entrepreneurs seeking investors. *Entrepreneurship Theory and Practice*, 38, 1057-1080. doi:10.1111/j.1540-6520.2011.00475.x
- Mayer, I. (2015). Qualitative research with a focus on qualitative data analysis. *International Journal of Sales, Retailing & Marketing*, 4, 53-67. Retrieved from <http://www.ijssrm.com/ijssrm/Home.html>
- McAllister, D. J. (1995). Affect and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38, 24-59. doi:10.2307/256727
- McIntosh, M. J., & Morse, J. M. (2015). Situating and constructing diversity in semi-structured interviews. *Global Qualitative Nursing Research*, 2, 1-12. doi:10.1177/2333393615597674
- McKibben, W. B., & Silvia, P. J. (2016). Inattentive and socially desirable responding: Addressing subtle threats to validity in quantitative counseling research. *Counseling Outcome Research and Evaluation*, 7, 53-64. doi:10.1177/2150137815613135
- Mertens, D. M. (2014). Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods. Thousand Oaks, CA: Sage.
- Metcalf, J. (2016). Big data analytics and revision of the common rule. *Communications of The ACM*, 59, 31-33. doi:10.1145/2935882
- Meyerson, D., Weick, K. A., & Kramer, R. M. (1996). Swift Trust and Temporary

- Groups. In R. M. Kramer and T. R. Tyler (Eds.), *Trust in Organizations: Frontiers of Theory and Research* (pp. 166–195). Thousand Oaks, CA: Sage.
- Miao, Q., Newman, A., & Huang, X. (2014). The impact of participative leadership on job performance and organizational citizenship behavior: Distinguishing between the mediating effects of affective and cognitive trust. *The International Journal of Human Resource Management*, 25, 2796-2810.
doi.org/10.1080/09585192.2014.934890
- Minas, R. K., Potter, R. F., Dennis, A. R., Bartelt, V., & Bae, S. (2014). Putting on the thinking cap: using NeuroIS to understand information processing biases in virtual teams. *Journal of Management Information Systems*, 30, 49-82.
doi:10.2753/MIS0742-1222300403
- Mislin, A., Williams, L. V., & Shaughnessy, B. A. (2015). Motivating trust: Can mood and incentives increase interpersonal trust? *Journal of Behavioral and Experimental Economics*, 58, 11-19. doi:10.1016/j.socec.2015.06.001
- Mocanu, M. D. (2014). Virtual teams—An opportunity in the context of globalization. *Business Excellence and Management*, 4, 47-53. Retrieved from <http://beman.ase.ro>
- Morgan, L., Paucar-Caceres, A., & Wright, G. (2014). Leading effective global virtual teams: The consequences of methods of communication. *Systemic Practice & Action Research*, 27, 607-624. doi:10.1007/s11213-014-9315-2
- Morita, P. P., & Burns, C. M. (2014). Trust tokens in team development. *Team Performance Management*, 20, 39-64. doi:10.1108/TPM-03-2013-0006

- Morley, S., Cormican, K., & Folan, P. (2015). An analysis of virtual team characteristics: A model for virtual project managers. *Journal of Technology Management & Innovation*, 10, 188-203. doi:10.4067/S0718-27242015000100014
- Morse, J. M. (2015). Analytic strategies and sample size. *Qualitative Health Research*, 25, 1317-1318. doi:10.1177/1049732315602867
- Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research*, 25, 1212-1222. doi:10.1177/1049732315588501
- Morse, W. C., Lowery, D. R., & Steury, T. (2014). Exploring saturation of themes and spatial locations in qualitative public participation geographic information systems research. *Society & Natural Resources*, 27, 557-571. doi:10.1080/08941920.2014.888791
- Moustakas, C. (1994). Phenomenological research methods. Thousand Oaks, CA: Sage.
- Mukherjee D., & Natrajan, N. S. (2017). Comparative analysis of social media tool used in software projects deploying virtual teams. *Vision: The Journal of Business Perspective*, 21, 397–409. doi:10.1177/0972262917733180
- Muneer, S., Iqbal, S. M. J., & Long, C. S. (2014). An incorporated structure of perceived organizational support, knowledge-sharing behavior, organizational trust and organizational commitment: A strategic knowledge management approach. *Pakistan Journal of Commerce and Social Sciences*, 8, 42-57. Retrieved from <http://www.jespk.net>
- Nam, C. W. (2014). The effects of trust and constructive controversy on student

- achievement and attitude in online cooperative learning environments, *Computers in Human Behavior*, 37, 237-248. doi:10.1016/j.chb.2014.05.007
- Narayanasamy, A. (2015). Reflexive account of unintended outcomes from spiritual care qualitative research. *Journal of Research in Nursing*, 20, 234-248. doi:10.1177/1744987115578185
- Newman, A., Kiazad, K., Miao, Q., & Cooper, B. (2014). Examining the cognitive and affective trust-based mechanisms underlying the relationship between ethical leadership and organisational citizenship: A case of the head leading the heart? *Journal of Business Ethics*, 123, 113-123. doi:10.1007/s10551-013-1803-2
- Nienaber, A., Romeike, P. D., Searle, R., & Schewe, G. (2015). A qualitative meta-analysis of trust in supervisor-subordinate relationships. *Journal of Managerial Psychology*, 30, 507-534. doi:10.1108/JMP-06-2013-0187
- Nilsson, M., & Mattes, J. (2015). The spatiality of trust: Factors influencing the creation of trust and the role of face-to-face contacts. *European Management Journal*, 33, 230-244. doi:10.1016/j.emj.2015.01.002
- Nirwan, V. S. (2014). Interpersonal trust and team performance: A quantitative study. *Journal of Organisation & Human Behaviour*, 3, 10-14. <http://www.publishingindia.com/johb/48/335/2014/>
- Nordstrom, S. N. (2015). Not so innocent anymore: Making recording devices matter in qualitative interviews. *Qualitative Inquiry*, 21, 388-401. doi:10.1177/1077800414563804
- O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014).

- Standards for reporting qualitative research: A synthesis of recommendations. *Academic Medicine*, 89, 1245-1251. doi:10.1097/ACM.0000000000000388
- Olaisen, J., & Revang, O. (2017). Working smarter and greener: Collaborative knowledge sharing in virtual global project teams. *International Journal of Information Management*, 37, 1441-1448. doi:10.1016/j.ijinfomgt.2016.10.002
- Oliveira, M., Bitencourt, C. C., Zanardo dos Santos, A. M., & Teixeira, E. K. (2016). Thematic content analysis: Is there a difference between the support provided by the MAXQDA® and NVIVO® software packages? *Brazilian Journal of Management / Revista De Administração Da UFSM*, 9, 72-82. doi:10.5902/1983465911213
- Olsen, D. P., Lehto, R. H., & Chan, R. R. (2016). Ethical case study of the researcher-participant relationship in end-of-life research. *Western journal of nursing research*, 38, 1205-1220. doi:10.1177/0193945916639590
- Onwuegbuzie, A. J., & Byers, V. T. (2014). An exemplar for combining the collection, analysis, and interpretations of verbal and nonverbal data in qualitative research. *International Journal of Education*, 4, 183-246. doi:10.5296/ije.v6i1.4399
- Owen, G. T. (2014). Qualitative methods in higher education policy analysis: Using interviews and document analysis. *The Qualitative Report*, 19, 1-19. Retrieved from: <http://nsuworks.nova.edu/tqr/vol19/iss26/2>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and*

- Mental Health Services Research*, 42, 533-544. doi:10.1007/s10488-013-0528-y
- Pangil, F., & Moi Chan, J. (2014). The mediating effect of knowledge sharing on the relationship between trust and virtual team effectiveness. *Journal of Knowledge Management*, 18, 92-106. doi:10.1108/JKM-09-2013-0341
- Park, J. G., & Lee, J. (2014). Knowledge sharing in information systems development projects: Explicating the role of dependence and trust. *International Journal of Project Management*, 32, 153-165. doi:10.1016/j.ijproman.2013.02.004
- Park, J., & Park, M. (2016). Qualitative versus quantitative research methods: Discovery or justification? *Journal of Marketing Thought*, 3, 1-7.
doi:10.15577/jmt.2016.03.01.1
- Pathak, A. A. (2015). Effective knowledge management boosts virtual teams. *Human Resource Management International Digest*, 23, 26-28. doi:10.1108/HRMID-03-2015-0048
- Patias, T. Z., Bobsin, D., Gomes, C. M., Liszbinski, B. B., & Damke, L. I. (2016). Family agro-industry clusters from the social innovation perspective. *Revista De Administração Mackenzie*, 17, 191-215. doi:10.1590/1678-69712016/administracao.v17n6p191-215
- Paul, R., Drake, J. R., & Liang, H. (2016). Global virtual team performance: The effect of coordination effectiveness, trust, and team cohesion. *IEEE Transactions on Professional Communication*, 59, 186-202. doi:10.1109/TPC.2016.2583319
- Pearce, S. (2015). Communication, teamwork, and trust in an office-based practice. *AORN Journal*, 10, 144-148. doi.org/10.1016/j.aorn.2014.10.005

- Pelegrini, P., Catherine, M., & Burns, M. (2014). Trust tokens in team development. *Team Performance Management*, 20, 39-64. doi:10.1108/TPM-03-2013-0006
- Peñarroja, V., Orengo, V., Zornoza, A., Sánchez, J., & Ripoll, P. (2015). How team feedback and team trust influence information processing and learning in virtual teams: A moderated mediation model. *Computers in Human Behavior*, 48, 9-16. doi:10.1016/j.chb.2015.01.034
- Perlow, L. A., & Kelly, E. L. (2014). Toward a model of work redesign for better work and better life. *Work and Occupations*, 41, 111-134. doi:10.1177/0730888413516473
- Peticca-Harris, A., deGama, N., & Elias, S. R. (2016). A dynamic process model for finding informants and gaining access in qualitative research. *Organizational Research Methods*, 19, 376-401. doi:10.1177/1094428116629218
- Petrova, E., Dewing, J., & Camilleri, M. (2016). Confidentiality in participatory research: Challenges from one study. *Nursing Ethics*, 23, 442-454. doi:10.1177/0969733014564909
- Pierce, E., & Hansen, S. W. (2013). Technology, trust and effectiveness in virtual teams. *International Journal of Management and Business*, 4, 33-60. Retrieved from <http://www.ccsenet.org/journal/index.php/ijbm>
- Pinar, T., Zehir, C., Kitapçı, H., & Tanriverdi, H. (2014). The relationships between leadership behaviors team learning and performance among the virtual teams. *International Business Research*, 7, 68-79. doi:10.5539/ibr.v7n5p68
- Plamondon, K. M., Bottorff, J. L., & Cole, D. C. (2015). Analyzing data generated

through deliberative dialogue: Bringing knowledge translation into qualitative analysis. *Qualitative Health Research*, 25, 1529-1539.

doi:10.1177/1049732315581603

Poon, P., Albaum, G., & Yin, C. Y. (2017). Exploring risks, advantages and interpersonal trust in buyer-salesperson relationships in direct selling in a non-western country.

International Journal of Retail & Distribution Management, 45, 328-342.

doi:10.1108/IJRDM-08-2016-0124

Portis, R. (2015). Fostering interpersonal trust as a norm in organizations: Five key starting points, Development and Learning in Organizations: *An International*

Journal, 29, 10-13. doi:10.1108/DLO-01-2015-0008

Prendergast, M. L., Hall, E. A., Grossman, J., Veliz, R., Gregorio, L., Warda, U. S., . . .

Knight, C. (2015). Effectiveness of using incentives to improve parolee admission and attendance in community addiction treatment. *Criminal justice and*

behavior, 42, 1008-1031. doi:10.1177/0093854815592914

Purvanova, R. K. (2014). Face-to-face versus virtual teams: What have we really learned?

The Psychologist-Manager Journal, 17(1), 2-29. doi:10.1037/mgr0000009

Qteishat, M. K. (2014). Factors influencing the adoption of e-leader: An empirical field study of Jordanian Banks. *International Journal of Human Resource Studies*, 4,

228. doi:10.5296/ijhrs.v4i3.6198

Raab, K. J., Ambos, B., & Tallman, S. (2014). Strong or invisible hands? Managerial involvement in the knowledge sharing process of globally dispersed knowledge

groups. *Journal of World Business*, 49, 32-41. doi:10.1016/j.jwb.2013.02.005

- Rao, A. N. (2015). Trust and team performance: Assessing the moderating role of risk in global outsourcing teams. *International Management Review*, 11(1), 5-16.
Retrieved from <http://www.usimr.org>
- Reed, E., Khoshnood, K., Blankenship, K. M., & Fisher, C. B. (2014). Confidentiality, privacy, and respect: Experiences of female sex workers participating in HIV research in Andhra Pradesh, India. *Journal of Empirical Research on Human Research Ethics*, 9, 19-28. doi:10.1525/jer.2014.9.1.19
- Ribeiro Serra, F. A. (2015). Constructing a literature review. *Revista Ibero-Americana de Estratégia*. 14, 1-5. doi:10.5585/rae.v14i3.2271
- Robert, C., Dunne, T. C., & Iun, J. (2016). The impact of leader humor on subordinate job satisfaction: The crucial role of leader-subordinate relationship quality. *Group & Organization Management*, 41, 375-406. doi:10.1177/1059601115598719
- Robinson, J. (2016). Look Before You Lead: Seeing Virtual Teams Through the Lens of Games. *Technical Communication Quarterly*, 25, 178-190.
doi.org/10.1080/10572252.2016.1185159
- Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, 11, 25-41.
doi:10.1080/14780887.2013.801543
- Rohrbach, B., Anderson, S., & Laube, P. (2016). The effects of sample size on data quality in participatory mapping of past land use. *Environment and Planning B: Planning and Design*, 43, 681-697. doi:10.1177/0265813515618578
- Roulston, K., & Shelton, S. A. (2015). Reconceptualizing bias in teaching qualitative

research methods. *Qualitative Inquiry*, 21, 332-342.

doi:10.1177/1077800414563803

Rudnick, A. (2014). A philosophical analysis of the general methodology of qualitative research: A critical rationalist perspective. *Health Care Analysis*, 22, 245-254.

doi:10.1007/s10728-012-0212-5

Rutten, W., Blaas-Franken, J., & Martin, H. (2016). The impact of (low) trust on knowledge sharing. *Journal of Knowledge Management*, 20, 199-214.

doi:10.1108/JKM-10-2015-0391

Saafein, O., & Shaykhian, G. A. (2014). Factors affecting virtual team performance in telecommunication support environment. *Telematics and Informatics*, 31, 459-462. doi:10.1016/j.tele.2013.10.004

Salas, E., Shuffler, M. L., Thayer, A. L., Bedwell, W. L., & Lazzara, E. H. (2015).

Understanding and improving teamwork in organizations: A scientifically based practical guide. *Human Resource Management*, 54, 599-622.

doi:10.1002/hrm.21628

Saunders, B., Kitzinger, J., & Kitzinger, C. (2015). Anonymising interview data:

Challenges and compromise in practice. *Qualitative Research*, 15, 616-632.

doi:10.1177/1468794114550439

Saxena, R. (2017). Muddling Through the passage of qualitative research: Experiences of a novice researcher. *Vision*, 21, 314-322. doi:10.1177/0972262917721423

Schiller, S. Z., Mennecke, B. E., Nah, F. F. H., & Luse, A. (2014). Institutional

boundaries and trust of virtual teams in collaborative design: An experimental

- study in a virtual world environment. *Computers in Human Behavior*, 35, 565-577. doi:10.1016/j.chb.2014.02.051
- Schmidt, G. (2014). Virtual Leadership: An Important Leadership Context. *Industrial and Organizational Psychology*, 7, 182-187. doi:10.1111/iops.12129
- Schrems, B. M. (2014). Informed consent, vulnerability and the risks of group-specific attribution. *Nursing Ethics*, 21, 829-843. doi:10.1177/0969733013518448
- Seitz, S. (2016). Pixilated partnerships, overcoming obstacles in qualitative interviews via Skype: A research note. *Qualitative Research*, 16, 229-235. doi:10.1177/1468794115577011
- Sekhon, H., Ennew, C., & Kharouf, H (2014). Trustworthiness and trust: influences and implications. *Journal of Marketing Management*, 30, 409-430. doi:10.1080/0267257X.2013.842609
- Sellaro, R., Hommel, B., de Kwaadsteniet, E. W., van de Groep, S., & Colzato, L. S. (2014). Increasing interpersonal trust through divergent thinking. *Frontiers in psychology*, 5, 1-4. doi:10.3389/fpsyg.2014.00561
- Seo, H. M., Kim, M. C., Chang, K., & Kim, T. (2016). Influence of interpersonal trust on innovative behavior of service workers: Mediating effects of knowledge sharing. *International Journal of Innovation Management*, 20, 1-21. doi:10.1142/S1363919616500262
- Shazi, R., Gillespie, N., & Steen, J. (2015). Trust as a predictor of innovation network ties in project teams. *International Journal of Project Management*, 33, 81-91. doi.org/10.1016/j.ijproman.2014.06.001

- Shekhar Singh, A. (2014). Conducting case study research in non-profit organizations. *Qualitative Market Research: An International Journal*, 17, 77-84.
doi:10.1108/QMR-04-2013-0024
- Simmonds, S., Roux, C., & Avest, I. T. (2015). Blurring the boundaries between photovoice and narrative inquiry: A narrative-photovoice methodology for gender-based research. *International Journal of Qualitative Methods*, 14, 33-49.
doi:10.1177/160940691501400303
- Smalley, J. B., Merritt, M. W., Al-Khatib, S. M., McCall, D., Staman, K. L., & Stepnowsky, C. (2015). Ethical responsibilities toward indirect and collateral participants in pragmatic clinical trials. *Clinical Trials*, 12, 476-484.
doi:10.1177/1740774515597698
- Smite, D., Kuhrmann, M., & Keil, P. (2014). Virtual Teams [Guest editors' introduction]. *IEEE Software*, 31, 41-46. doi:10.1109/MS.2014.149
- Smith, J., & Noble, H. (2015). Issues of validity and reliability in qualitative research. *Evidence-Based Nursing* 18, 34-35. doi:10.1136/eb-2015-102054
- Smith, J., & Noble, H. (2014). Bias in research. *Evidence - Based Nursing*, 17, 100-101.
doi.org/10.1136/eb-2014-101946
- Smith, S. A., Patmos, A., & Pitts, M. J. (2018). Communication and teleworking: A study of communication channel satisfaction, personality, and job satisfaction for teleworking employees. *International Journal of Business Communication*, 55, 44-68. doi:10.1177/2329488415589101
- Søderberg, A. M., Krishna, S., & Bjørn, P. (2013). Global software development:

- commitment, trust and cultural sensitivity in strategic partnerships. *Journal of International Management*, 19, 347-361. doi:10.1016/j.intman.2013.04.004
- Sox, C. B., Kline, S. F., Crews, T. B., Strick, S. K., & Cambell, J. M. (2017). Virtual and hybrid meetings: A mixed research synthesis of 2002-2012 research. *Journal of Hospitality & Tourism Research*. 41, 945-984. doi:10.1177/1096348015584437
- Spinuzzi, C. (2014). How nonemployer firms stage-manage ad hoc collaboration: An activity theory analysis. *Technical Communication Quarterly*, 23, 88-114. doi:10.1080/10572252.2013.797334
- Suopajarvi, T. (2015). Past experiences, current practices and future design: Ethnographic study of aging adults' everyday ICT practices - and how it could benefit public ubiquitous computing design. *Technological Forecast and Social Change*, 93, 112-123. doi:10.1016/j.techfore.2014.04.006
- Sutherland, O., Dawczyk, A., Leon, K. De, Cripps, J., & Lewis, S. P. (2014). Self-compassion in online accounts of non-suicidal self-injury: An interpretive phenomenological analysis. *Counselling Psychology Quarterly*, 27, 409-433. doi:10.1080/09515070.2014.948809
- Tamer, I., & Dereli, B. (2014). The relationship between interpersonal trust, peer support and organizational commitment. *Journal of Marmara University Social Sciences Institute / Öneri*, 11, 175-196. doi:10.14783/ONERI.2014427002
- Tellado, I., López-Calvo, L., & Alonso-Olea, M. J. (2014). Dialogic design of qualitative data collection for researching the mirage of upward mobility. *Qualitative Inquiry*, 20, 856-862. doi:10.1177/1077800414537207

- TenHouten, W. D. (2017). Site sampling and snowball sampling-methodology for accessing hard-to-reach populations. *Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique*, 134, 58-61.
doi:10.1177/0759106317693790
- Tenzer, H., Pudelko, M., & Harzing, A. W. (2014). The impact of language barriers on trust formation in multinational teams. *Journal of International Business Studies*, 45, 508-535. doi:10.1057/jibs.2013.64
- Tetteh, M. L., & Okantey, P. C. (2016). Multinational subsidiary performance: Evidence from the Ghanaian banking sector. *Ghana Journal of Development Studies*, 13, 41-62. doi:10.4314/gjds.v13i1.3
- Teusner, A. (2016). Insider research, validity issues, and the OHS professional: one person's journey. *International Journal of Social Research Methodology*, 19, 85-96. doi:10.1080/13645579.2015.1019263
- Thorpe, A. S. (2014). Doing the right thing or doing the thing right: Implications of participant withdrawal. *Organizational Research Methods*, 17, 255-277.
doi:10.1177/1094428114524828
- Tibben, W. J. (2015). Theory building for ict4d: systemizing case study research using theory triangulation. *Information Technology for Development*, 21, 628-652.
doi:10.1080/02681102.2014.910635
- Toews, I., Booth, A., Berg, R. C., Lewin, S., Glenton, C., Munthe-Kaas, H. M., Noyes, J., Schroter, S., & Meerpohl, J. J. (2017). Further exploration of dissemination bias in qualitative research required to facilitate assessment within qualitative evidence

syntheses. *Journal of Clinical Epidemiology*, 88, 133-139.

doi:10.1016/j.jclinepi.2017.04.010

Trautrim, A., Defee, C., & Farris, T. (2016). Preparing business students for workplace reality—using global virtual teams in logistics and SCM education. *The International Journal of Logistics Management*, 27, 886-907. doi:10.1108/IJLM-01-2015-0003

Tremblay, M., & Gibson, M. (2016). The role of humor in the relationship between transactional leadership behavior, perceived supervisor support, and citizenship behavior. *Journal of Leadership & Organizational Studies*, 23, 39-54. doi:10.1177/1548051815613018

Trepal, H., Stinchfield, T., & Haiyasoso, M. (2014). Great expectations: Doctoral student mothers in counselor education. *Adultspan Journal*, 13, 30-45. doi:10.1002/j.2161-0029.2014.00024.x

Tumele, S. (2015). Case study research. *International Journal of Sales, Retailing & Marketing*, 4, 68-78. Retrieved from <http://www.ijssrm.com/IJSSRM/Home.html>

Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, 6, 100-110. doi:10.5430/jnep.v6n5p100

Valentin, C. (2014). The extra mile deconstructed: A critical and discourse perspective on employee engagement and HRD. *Human Resource Development International*, 17, 1-16. doi:10.1080/13678868.2014.932091

Van Maanen, J. (2015). The present of things past: Ethnography and career

- studies. *Human Relations*, 68, 35-53. doi:10.1177/0018726714552287
- VanScoy, A., & Evenstad, S. B. (2015). Interpretative phenomenological analysis for LIS research. *Journal of Documentation*, 71, 338-357. doi:10.1108/JD-09-2013-0118
- Vaughn, P., & Turner, C. (2016). Decoding via coding: Analyzing qualitative text data through thematic coding and survey methodologies, *Journal of Library Administration*, 56, 41-51. doi:10.1080/01930826.2015.1105035
- Vohra, N., Rathi, N., & Bhatnagar, D. (2015). Developing leadership skills among EMBA students: Innovations in design. *Vikalpa*, 40, 15-27. doi:10.1177/025609091557361
- Vohra, V. (2014). Using the multiple case study design to decipher contextual leadership behaviors in Indian organizations. *Electronic Journal of Business Research Methods*, 12, 54-65. Retrieved from <http://www.ejbrm.com>
- Wadsworth, M. B., & Blanchard, A. L. (2015). Influence tactics in virtual teams. *Computers in Human Behavior*, 44, 386-393. doi.org/10.1016/j.chb.2014.11.026
- Walsh, I., Holton, J. A., Bailyn, L., Fernandez, W., Levina, N., & Glaser, B. (2015). What grounded theory is... A critically reflective conversation among scholars. *Organizational Research Methods*, 18, 581-599. doi:10.1177/1094428114565028
- Wang, W., Qiu, L., Kim, D., & Benbasat, I. (2016). Effects of rational and social appeals of online recommendation agents on cognition- and affect-based trust. *Decision Support Systems*, 86, 48-60. doi:10.1016/j.dss.2016.03.007
- Ward, D., Kourti, N., Lazari, A., & Cofta, P. (2014). Trust building and the European

reference network for critical infrastructure protection community. *International Journal of Critical Infrastructure Protection*, 7, 193-210.

doi:10.1016/j.ijcip.2014.07.003

Watanuki, H. M., & Moraes, R. D. O. (2016). Does size matter? An investigation into the role of virtual team size in IT service provisioning. *Industrial Management & Data Systems*, 116, 1967-1986. doi:10.1108/IMDS-07-2015-0300

Waters, J. (2015). Snowball sampling: a cautionary tale involving a study of older drug users. *International Journal of Social Research Methodology*, 18, 367-380.

doi:10.1080/13645579.2014.953316

Waters, R. (2014). Overcoming nonprofit sector challenges through improved communication. *International Journal of Nonprofit & Voluntary Sector Marketing*, 19, 221-223. doi:10.1002/nvsm.1512

Watts, A. R., Williams, B., Kim, S. W., Bramwell, D. C., & Krishnan, J. (2017). Shoulder impingement syndrome: A systematic review of clinical trial participant selection criteria. *Shoulder & Elbow*, 9, 31-41. doi:10.1177/1758573216663201

White, M. (2014). The management of virtual teams and virtual meetings. *Business Information Review*, 31, 111-117. doi:10.1177/026638211454097

Wilson, V. (2014). Research methods: Triangulation. *Evidence Based Library and Information Practice*, 9, 74-75. Retrieved from

<http://ejournals.library.ualberta.ca/index.php/EBLIP>

Wu, B., & Zhang, C. (2015). Trust evaluation for inter-organization knowledge sharing via the e-learning community. *The Electronic Library*, 33, 400-416.

doi:10.1108/EL-08-2013-0140

Wu, L., Chuang, C. H., & Hsu, C. H. (2014). Information sharing and collaborative behaviors in enabling supply chain performance: A social exchange perspective. *International Journal of Production Economics*, 148, 122-132.

doi:10.1016/j.ijpe.2013.09.016

Wyatt, K. M., Brand, S., Ashby-Pepper, J., Abraham, J., & Fleming, L. E. (2015). Understanding how healthy workplaces are created: Implications for developing a national health service healthy workplace program. *International Journal of Health Services: Planning, Administration, Evaluation*, 45, 161-185.

doi:10.2190/HS.45.1.m

Yang, I. (2014). What makes an effective team? The role of trust (dis) confirmation in team development. *European Management Journal*, 32, 858-869.

doi:10.1016/j.emj.2014.04.001

Yao, C., Tsai, C., & Fang, Y. (2015). Understanding social capital, team learning, members' e-loyalty and knowledge sharing in virtual communities. *Total Quality Management & Business Excellence*, 26, 619-631.

doi:10.1080/14783363.2013.865918

Yilmaz, G. (2016). What you do and how you speak matter: behavioral and linguistic determinants of performance in virtual teams. *Journal of Language and Social Psychology*, 35, 76-97. doi:10.1177/0261927X15575772

Yilmaz, G., & Peña, J. (2014). The influence of social categories and interpersonal behaviors on future intentions and attitudes to form subgroups in virtual teams.

Communication Research, 41, 333-352. doi:10.1177/0093650212443696

Yin, R. K. (2014). *Case study research and applications: Design and methods*. (6th ed.).

Thousand Oaks, CA: Sage.

Yüksel, A. (2017). A critique of “response bias” in the tourism, travel and hospitality research. *Tourism Management*, 59, 376-384. doi:10.1016/j.tourman.2016.08.00

Zarolia, P., Weisbuch, M., & McRae, K. (2017). Influence of indirect information on interpersonal trust despite direct information. *Journal of Personality & Social Psychology*, 112, 39-57. doi:10.1037/pspi0000074

Zheng, H., Li, D., Wu, J., & Xu, Y. (2014). The role of multidimensional social capital in crowdfunding: A comparative study in China and US. *Information & Management*, 51, 488-496. doi:10.1016/j.im.2014.03.003

Zhu, Y., & Akhtar, S. (2014). How transformational leadership influences follower helping behavior: The role of trust and prosocial motivation. *Journal of Organizational Behavior*, 35, 373-392. doi:10.1002/job.1884

Zhu, Y., & Akhtar, S. (2014). The mediating effects of cognition-based trust and affect-based trust in transformational leadership's dual processes: Evidence from China. *International Journal of Human Resource Management*, 25, 2755-2771. doi:10.1080/09585192.2014.934885

Ziek, P., & Smulowitz, S. (2014). The impact of emergent virtual leadership competencies on team effectiveness. *Leadership & Organization Development Journal*, 35, 106-120. doi:10.1108/LODJ-03-2012-0043

Zivick, J. (2012). Mapping global virtual team leadership actions to organizational roles.

Business Review, Cambridge, 19, 18-25. Retrieved from <http://www.jaabc.com>

Zutlevics, T. L. (2016). Could providing financial incentives to research participants be ultimately self-defeating? *Research Ethics, 12*, 137-148.

doi:10.1177/1747016115626756

Appendix A: Interview Protocol

I. Before Interviews

- a. Agree with participants on date and time for interviews.
- b. Ask participants' tool preference for interviews (Telephone or Skype).
- c. Test recording device.
- d. Test Skype video calls and ensure availability of Internet service.
- e. Ensure Telephone service is working properly.

II. During Interviews

- a. Introduction
 - i. Greet participants.
 - ii. State names.
 - iii. Provide a brief description of the study (business problem and purpose).
 - iv. Check if participants have any questions.
- b. Audio Recording
 - i. Inform participants before recording interviews to confirm their consent as the informed consent form provides.
 - ii. Ask if participants have any concerns.
 - iii. Turn recorder on.
- c. Start Interviews
 - i. Introduce participants using pseudonyms.
 - ii. Mention the date and time of interviews.

iii. Ask Interview questions:

1. What strategies have you used to build trust among members in virtual teams?
2. What barriers did you encounter in implementing the strategies for building trust among members in virtual teams?
3. How did you address the barriers in implementing strategies for building trust among members in virtual teams?
4. What strategies were most effective in building trust among virtual team members?
5. What strategies were least effective in building trust among virtual team members?
6. How do your team members communicate and interact with each other and how does this affect trust formation within the virtual team?
7. How do cultural differences, technology, knowledge sharing, time difference, and geographical location affect trust in virtual teams?
8. What else would you like to add on this subject of strategies for building trust in virtual teams?

d. Closing

- i. Thank participants for participating in the study.
- ii. Verify any changes to participants' contact information (telephone numbers and email addresses).
- iii. Discuss post interview interactions with participants.

III. Post-Interviews

- a. Ask follow-up questions.
- b. Perform member checking with interview transcripts.

Appendix B: Invitation Letter (Email)

Alphonse Kwaye

Walden University Student

Date: _____

Dear _____,

My name is Alphonse Kwaye and I am a Walden University doctoral student conducting a study on virtual teams entitled: Effective Strategies for Building Trust in Virtual Teams. The purpose of this study is to explore strategies virtual team leaders in large corporate banks use to build trust among virtual team members. The participation criteria for this study include virtual team leaders (a) working for a large corporate bank, (b) with at least 1 year of work experience in the target organization, and (c) with at least a year of successful trust-building experience in virtual teams. This is an invitation for you to participate in an hour-long audio recorded interview using Skype or telephone wherein you will respond to eight open-ended semistructured questions in support of my doctoral study. Your participation will also include responding to follow-up questions and attending an additional one hour-long interview to review my description and interpretation of responses collected during the initial interview for accuracy. If you would like to take part in the study, please contact me using my email or telephone number listed below. Upon receiving confirmation of your willingness to participate in the study, I will send you an informed consent form explaining your rights to withdraw from the research at any time without penalty, voluntary participation in the study, and the confidentiality of all information received from participants.

I value and appreciate your participation in this study. Please, contact me with any questions you may have through my email address: [REDACTED] or telephone number: [REDACTED]

Thank you

Alphonse Kwaye