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Traits and Management Strategies Attributed to the Success of Virtual-team Leaders

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Walden University

College of Management and Technology

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Walden University

2018

Abstract

Traits and Management Strategies Attributed to the Success of Virtual-team Leaders

by

Roderick Haley

MS, Troy University, 1998

BS, University of Alabama, 1989

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

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Abstract

The rapid advances in technology and the globalization of the economy have led corporate leaders to invest heavily in virtual teams to increase their global coverage. The problem in this phenomenological study was that many organizational leaders do not understand the extent to which they need to manage virtual teams differently from traditional, face-to-face teams. This is significant, because due to geographical differences and possibly cultural differences, virtual teams require various modes of communication. The purpose of this study was to explore and describe the lived experiences of effective virtual-team leaders and the operational strategies employed to lead them. The answer to the research questions included strategies that virtual-team leaders applied to make their teams successful. The conceptual framework was comprised of the theories of transformational leadership and leader–member exchange. Data collection took place through open-ended interviews with 20 virtual-team leaders. Moustakas' modified version of the van Kaam analysis method was used to code and organize the data. The interview data were classified into common themes to provide a better understanding of the participants' perceptions and experiences. The results indicated that the primary virtual team challenges were communication and face-to-face connections. The strategies for managing these challenges included more open and scheduled communication, making sure the team members know their roles and responsibilities, and clear and concise goals and objectives from the virtual-team leaders. The implication for positive social change is that the effectiveness of virtual-team leaders may improve thus benefiting management, employees, and customers.

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Dedication

I dedicate this dissertation to my amazing wife Teresa. Your prayers and encouragement motivated me to stay focused and pushed me to achieve this accomplishment. Thank you for sharing this journey with me. You are my inspiration and my best friend. I love you dearly. I am also thankful for our incredible triplets, Brandon, Darius, and Gabrielle. You continually asked about my progress throughout this journey and kept me moving forward. All of you have a major part in this achievement, you mean the world to me, and I could not have completed this doctoral journey without you. I love you.

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Chapter 1: Introduction to the Study

Virtual teams play a significant role in the strategies of productive global organizations, and the success of many global organizations depends more on global market performance than in previous times (Hamersly & Land, 2015). The expansion of global organizations makes having virtual teams a reality. Many such organizations have virtual teams, and due to communication advances and other types of information technology, the labor force may be in multiple countries. Global virtual teams are an integral part of the 21st-century workforce environment (Cramton & Hinds, 2009). Many organizations have global business locations with global virtual teams assigned to them. Business employees who work for global corporations and virtual teams are cross-cultural and interactive using various means of technology (Goodman & Bray, 2014). Global organizational leaders must communicate and coordinate in a timely manner to ensure success.

Virtual teams developed as an important part of organizational strategy. Consequently, organizations now have businesses located in various parts of the world, and virtual teams are critical to their productivity. Global virtual teams collaborate, even though they are geographically separate; they are technologically involved in the organizational decision-making process. Advancements in technology and advances in the global economy affect the success of businesses in the global market: Virtual teams continue to contribute to technological advancement (Gajendran & Joshi, 2012). Their geographical separation leads to such teams using more technology to coordinate and collaborate.

Virtual teams are commonplace in the business arena. Collaboration, communication, technology, and trust are major factors in the success of globally distributed teams. Organizational leaders realize the significance of virtual teams and the need for them to be productive (Morgan, Paucar-Caceres, & Wright, 2014). Global organizational leaders have seen the benefit of virtual teams. In this study, I address the character traits and management strategies of effective virtual-team leaders. Chapter 1 covers the following topics: the background of the study, problem statement, and purpose of this study, as well as the research questions, conceptual framework, and nature of the study, operational definitions, assumptions, scope and delimitations, limitations, and significance.

Background of the Study

Organizational success has become more dependent on the global market due to the worldwide expansion of organizations, and global virtual teams have become an integral part of an organization's strategic success. Virtual teaming is a way of organizing work that allows people to work together even though they are geographically separate (Gatlin-Watts, Carson, Horton, Maxwell, & Maltby, 2007). People working in virtual teams use technology to communicate with each other, instead of working face-to-face. In many global organizations, team members come from different countries and have diverse backgrounds, perspectives, and approaches to solving problems. To make the team members effective, team leaders must coordinate their activities and bring them together. Ferrazzi (2014), Goh and Wasko (2012), Hoch and Kozlowski (2014), and

Lepsinger and DeRosa (2015) described ways virtual-team leaders can lead virtual teams effectively: when team members trust the team leader.

Global organizational leaders have viewed trust as an essential element of virtual teams; It is one of the primary challenges of virtual teams (Chyng-Yang, 2013). Geographical separation, cultural differences, and lack of prior history in many virtual teams can lead to difficulty in establishing trust. One of the key elements in trust development is repeated interactions between virtual team members (Chyng-Yang, 2013). They must constantly communicate and coordinate with each other to develop trust.

The importance of virtual teams to the accomplishments of global organizations has grown because global organizations can have 24/7 productivity by having virtual teams working globally across time zones (Conine, 2014). As organizations continue to expand worldwide, the global market has become more important to organizations. In a 2015 British Chambers of Commerce survey of 4,700 global organizations, over half of these organizations, 55%, saw a positive impact in revenue within just 12 months of expanding into international markets (Hope, 2015). Virtual-team leaders need to manage different personalities and ensure that members work as a team. A virtual team's success depends not only on the leadership abilities of the leader, but also on the amount of trust the team members have in the leader to accomplish an organization's objectives (Bergiel, Bergiel, & Balsmeier, 2008). The virtual-team leader must establish trust in a diverse environment with multiple cultures (Dennis, Meola, & Hall, 2013). Trust is a motivator in team members contributing to the success of virtual teams (Benetytė & Jatuliavičienė,

2013; Pinar, Zehir, Kitapçı, & Tanriverdi, 2014). In addition to trust, virtual-team leaders must manage culturally diverse individuals', such that they accomplish organizational goals.

Managing traditional teams is not an easy mission for leaders, and when it comes to managing virtual teams, there are even more issues, such as communication with team members and time zone differences. Research on the common characteristics of effective virtual-team leaders is deficient, as is information on the leadership styles and strategies necessary to lead them (Hosseini et al., 2013). Anantatmula and Thomas (2010) noted that leaders of virtual team members must take on distinctive responsibilities that face-to-face teams typically do not have to. These leaders must clarify the roles and responsibilities of the team members (Dennis, Overholt, & Vickers, 2014). Relationship building, project coordination, and collaboration can also be more difficult in the virtual team environment.

The gap in the research indicated the lack of information about the characteristics and strategies of virtual-team leaders that make them successful from the perspective of their lived experiences. Virtual teams have increased around the world, but organizational leaders have not developed a strategy for the teams to be successful (Bull Schaefer, & Erskine, 2012). In 2012, more than 60% of professional workers were part of virtual teams (Bull Schaefer & Erskine, 2012), and more than 25% were not functioning at full capability (Lepsinger, 2012). The deficiencies in virtual team success are due to a lack of trust among team members, absence of constant communication, ineffective leadership, and lack of effective training programs for virtual-team leaders. This study is significant

because it shows how virtual leaders should manage their organization with positive effects not only on the organization and its employees, but also on the global community.

Problem Statement

Virtual teams have increased in popularity around the world; however, some leaders lack the communication skills needed to generate applicable managerial strategies to improve virtual team collaboration and performance. In a Society for Human Resource Management survey, 66% of multinational organizations, along with half of all organizations, use virtual teams (Lepsinger & DeRosa, 2015). Lepsinger (2012) reported that more than 25% of virtual teams were not performing at full capability. The general problem was that many organizational leaders do not understand the extent to which leaders must manage global virtual teams differently from traditional face-to-face teams (Quisenberry & Burrell, 2012). The specific problem was that some organizational leaders do not have effective strategies that drive the success of global virtual-team leaders. The gap in the research was the lack of information about the characteristics and strategies of virtual-team leaders that make them successful from the perspective of their lived experiences. Data came from 20 participants who have extensive knowledge of the issues under investigation, virtual-team leaders who shared their lived experiences in semistructured interviews.

Purpose of the Study

The purpose of this phenomenological study was to explore and describe the lived experiences of effective virtual-team leaders and the operational strategies they employed to lead them. The goal was to capture the lived experiences of virtual-team leaders to

identify the traits and characteristics that make them successful. The sample for the study consisted of 20 virtual-team leaders from different businesses across the United States with global business operations, and two from overseas. I interviewed these virtual-team leaders and collected data regarding their lived experiences. The computer-assisted qualitative data analysis software, Nvivo, helped in searching for an accurate and transparent picture of the effective traits that characterize successful virtual-team leaders. The organizations and participants remained anonymous for confidentiality reasons.

Managers might use the results from this study for promoting positive social change. By understanding the lived experiences of virtual-team leaders, they could give virtual teams a better opportunity to be successful. Virtual-team leaders who develop trust and effective communication with diverse team members, positively affect social change. Virtual-team leaders should be effective in leading cross-cultural and diverse virtual teams in a global market.

Research Questions

Research questions form the outline for conducting a research study. A good research question is one that guides and focuses the research (Duke Writing Studio, n.d.). The two questions for this study were:

RQ1: Based on lived experiences of virtual-team leaders, what are the differences in management strategies for virtual teams and traditional face-to-face teams?

RQ2: Based on lived experiences of virtual-team leaders, what are the best ways global virtual-team leaders can instill trust and improve communication among team members?

Interview Questions

The nine interviews questions used for this study are below:

1. Based on your experiences, what are some common leadership challenges for virtual-team leaders?
2. What leadership strategies are most effective in managing these leadership challenges?
3. From your experiences, what are your perceptions of the differences between management strategies of virtual-team leaders and traditional face-to-face leaders?
4. Based on your experiences, what are the primary leadership characteristics that successful virtual-team leaders need to have to overcome geographical differences?
5. Based on your experiences, what are the best strategies virtual-team leaders can use to improve communication among virtual team members?
6. Based on your experiences, what strategies can virtual-team leaders use to instill trust among virtual team members?
7. What are two leadership characteristics that can increase virtual team performance?
8. How do you know when your strategies are effective?
9. Is there any other important information you can provide can be included in the interview?

Conceptual Framework

The two conceptual theories that formed the foundation of this study were transformational leadership and leader–member exchange (LMX). Transformational leadership and LMX academic scholars have maintained that leaders can have a positive influence on the behavior, job satisfaction, and job attitudes of subordinates through different methods (Burch & Guarana, 2014). In transformational leadership, the focus can be on the ability of the leader to transform subordinates with a global motivating vision that inspires positive change among the subordinates; LMX emphasizes the significance of the unique leader–subordinate relationship as the key component of employees’ positive behavior and attitudes (Burch & Guarana, 2014). One of the reasons transformational leadership and LMX are important to the success of virtual teams and virtual-team leaders is the emphasis on the relationship between leaders and team members.

The central conceptual theory for this study was transformational leadership—the most applicable and effective form of leadership with virtual teams (Mukherjee, Lahiri, Mukherjee, & Billing, 2012). Transformational leaders have the ability and skill to motivate virtual team members to be successful. Burch and Guarana (2014) indicated that transformational leadership tends to focus on the ability of a leader to transform employees through a global inspirational vision. This vision can inspire positive social change among employees. Transformational leaders have the potential to be successful virtual-team leaders because of this ability. Dabke (2016) noted that transformational

leaders have the knowledge to create and develop the strategies necessary for virtual team members to be productive and to ensure that the team members follow similar procedures and practices.

Another theory I used in this research was the LMX theory. According to Wilson, Sin, and Conlon (2010), LMX theory represents the relationship between leader and member that develops based on trust, respect, loyalty, and support. The focus of most LMX research has been members' outcomes. The focus of this research was how LMX affects the leader (Wilson et al., 2010). Understanding how LMX affects leaders will help to improve LMX theory and virtual teams.

Nature of the Study

This phenomenological study sought to gain a deeper understanding of the meaning of participants' everyday experiences (Patton, 2015). Phenomenology also involves pursuing the essence of participants' lived experiences (Moustakas, 1994). The important finding that derives from phenomenology is an understanding of a phenomenon as seen through the eyes of those who have experienced it (Patton, 2015). A phenomenological study focuses on participants who have had similar experiences or who work in similar environments (Simon & Goes, 2018).

Approaches to phenomenology include constitutive, empirical, hermeneutic, interpretive, and descriptive (Embree, 1996; Moustakas, 1994). The phenomenological approach selected to conduct this research was descriptive phenomenology in order to focus on concrete descriptions of participants' lived experiences (Giorgi, 2009). Researchers identify a phenomenon to study, collect data from participants who have

lived experiences in the phenomenon, reflectively analyze the data, then identify general themes about the phenomenon (Giorgi, 2009). In this research, the phenomenon was virtual-team leadership, and the data were collected from 20 individuals who had led virtual teams.

In this study, I explored the lived experiences of effective virtual-team leaders. These lived experiences were important in making virtual-team leaders effective and productive. The result in phenomenological studies is an understanding of a phenomenon as seen through the eyes of the participants who have had the opportunity to experience it (Giorgi, 2009). After reading a phenomenological study, the reader should have a better understanding of what it is like to experience the phenomenon studied.

The data for this research was collected electronically from virtual-team leaders with questionnaires or telephone interviews. (face-to-face interviews were not feasible). A quantitative approach was not the best design to address the research problem. because, according to Simon and Goes (2018), a quantitative study is objective, and the goal is to locate quantitative data using numbers. This study involved describing the subjective realities of virtual teams from virtual-team leaders' perspective. To have a better understanding of this phenomenon, a qualitative method was the best approach.

Definitions

The following terms appear throughout the dissertation:

Collocated teams: Groups of people who work along with one another to reach a common goal, where team members work in the same location (Reed & Knight, 2010).

Global leadership: In global leadership, global leaders can competently work with cultural adaption and cultural integration. Successful global leadership occurs when global leaders can effectively address the cultural differences of workers (Caligiuri, 2013; Mendenhall & Bird, 2013).

Global market: A global market is the activity of buying or selling goods and services in all the countries of the world (Caligiuri, 2013).

Leader–member exchange (LMX): In the LMX, leader–subordinate relationships build on mutual interaction. This relationship is the foundation of leadership and helps individuals learn about each other (Kangas, 2013).

Tactics, techniques, and procedures (TTPs): Organizational leaders can use a set of tools called tactics, techniques, and procedures (TTPs) to develop solutions to various problems (Andress & Winterfeld, 2013).

Transformational leadership: A relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents (McCloskey, 2015).

Virtual teams: Aiken, Gu, and Wang (2013) defined a virtual team as a group of people working interdependently with a shared purpose using technology across time, space, and organizational boundaries.

Assumptions

Simon and Goes (2018) described assumptions as statements that are true and outside a researcher's control. This study was based on three assumptions. The first assumption was that characteristic traits and management strategies of virtual-team

leaders may be similar across organizations and geographic locations. However, some organization-specific skills and TTPs may differ between career fields and organizations. Organizational leadership may consider the characteristics and management strategies of virtual-team leaders from some career fields as more important than the qualities of virtual-team leaders from other career fields.

The second assumption was that virtual-team leaders with multiple cultural differences who lead organizations may have different management strategies and demonstrate distinct characteristics or traits. The culture and background of people from different countries can help shape the standards of various virtual teams. Virtual-team leaders and members work in organizations around the world in various time zones and geographical regions. Some may work in a combination of collocated teams and virtual teams. The leadership of these teams may have a structured system that follows TTPs, such as collocated teams, which could be beneficial to the performance of virtual teams.

The third assumption was that the virtual team's LMX relationship would be different between computer-based communication and face-to-face communication. Management and leaders may have more opportunities to interact face-to-face with employees in collocated environments than in virtual teams. This lack of face-to-face communication may cause the virtual team LMX relationship to be different. Communication between virtual team members usually relies on several types of telecommunication media (Collins Chou, & Warner, 2014). Face-to-face communication is more personal than computer-based communication.

Virtual teams and virtual team members are in organizations throughout the global business environment, separated by time zones and geography. The assumptions indicate how different cultures and geographic separation can affect leadership and the effects on communication between team members. However, these assumptions are part of what makes virtual-team leaders' effective leaders.

Scope and Delimitations

This qualitative phenomenological study included 20 participants from different global organizations in different time zones. Since the sample size was reached, data saturation was reached and then the analysis was not difficult: the findings were not limited, themes were not hard to identify, and there was plenty worthwhile to write about (Morse, 2015).

Delimitations of a research study are the boundaries of the study (Simon & Goes, 2018). Simon and Goes noted that delimitations result from limitations in the scope of the research. Virtual-team leaders whose organizations were unprofitable fell outside the scope of the study. All participants were adults over the age of 25. The participants were current or former virtual-team leaders with at least 2 years or more of experience. However, their experience, specific positions, knowledge level, and team involvement varied.

Limitations

This study included several limitations: weaknesses in a study that are out of a person's control. Limitations are potential occurrences and conditions that restrict the scope of the study (Simon & Goes 2018). The participants were virtual-team leaders, and

their responses could be biased. These virtual-team leaders could overstate their importance or embellish the truth when discussing their individual characteristics and leadership abilities. They could also fail to answer the open-ended questions with enough data to thoroughly answer the interview questions.

The semistructured interviews may work well because this form of interview allows new ideas to emerge during the interview process. Using telephone interviews to collect data could lead to eliminating the ability to capture participants' true answers to the questions (Salmons, 2012). In a telephone interview, researchers are not able to observe the participants' body language and get personal connections.

Virtual-team leaders were the participants in this research; thus, the ideas and perspectives of these participants could have reflected bias or partiality. I planned to gain an understanding of the phenomenon from a virtual-team leader perspective. Another limitation of the research was the possibility of standard answers, since I was not in the same location as the participants' during the interviews. Generalizing answers could be detrimental trying to obtain lived experiences. I focused on creating a comfortable atmosphere during the semistructured interview process, such that that the participants could speak openly and freely.

According to Patton (2015), transferability and dependability are factors that qualitative researchers should consider when designing a study. Transferability refers to the extent to which findings in a study are applicable to individuals outside the study in a different environment (Simon & Goes, 2018). Through transferability, researchers can make connections between different components of the study and their own experiences.

I focused on the lived experiences of virtual-team leader participants. The responses of the participants could have reflected bias, which, in turn, could have affected the transferability of the findings. In Chapter 3, there is further discussion of transferability. Dependability is necessary to ensure credibility in a study (Lincoln & Guba, 1985).

Significance of the Study

The purpose of this phenomenological study was to explore and describe the lived experiences of effective virtual-team leaders and the operational strategies that they used to lead their virtual teams. Global virtual-team leaders had to demonstrate the ability to lead cross-cultural and diverse virtual teams effectively. Organizational leaders could use the results of this research to further develop the leadership skills of virtual-team leaders. The findings in this study could provide current and future virtual-team leaders with the knowledge needed to make wiser decisions about management strategies that lead to positive social change in business organizations.

Managers may be able to use the results from this study to bring about positive social change by determining the characteristics required to be effective virtual-team leaders. Business leaders and stakeholders could have an interest in the findings from this study because the research included the best practices for leading virtual teams based on trust, communication, and knowledge management. The gap in the research was the lack of information regarding the characteristics and strategies of virtual-team leaders that make them successful. The findings of this study could help reduce this gap by providing information on the leadership strategies of successful virtual-team leaders.

Summary

This chapter included a background on the specific problem: Some organizational leaders have not developed effective strategies that can lead to the success of global virtual-team leaders. The participants were 20 individuals who have been virtual-team leaders in various business organizations across the United States. These virtual-team leaders participated in semistructured interviews and thus explored their lived experiences. The semistructured interviews consisted of open-ended questions. Organizational leaders may be able to use the findings to understand the attributes and characteristics required for virtual-team leaders to be effective. This study also involved exploring the type of leadership strategies required to lead successful virtual teams.

In Chapter 2, the literature review, I review how the awareness of the character attributes and management strategies of effective virtual-team leaders relates to the conceptual frameworks of transformational leadership and LMX theory. The literature review may increase understanding of the influence of transformational leadership and LMX theory on virtual teams and the management strategies used by these teams. Another topic addressed is how to address the ways that trust, communication, technology, and knowledge management contribute to the effectiveness of virtual teams. For management strategies, descriptions included leading virtual teams, developing management strategies, and team building. Chapter 3 includes a discussion of the study's research method and research design. This chapter will also include the study's research and data collection procedures. The sample selection process and the expected sample size is also included. Chapter 4 includes the results, data collection and data analysis

procedures, and evidence of trustworthiness. Chapter 5 includes an interpretation of the findings, limitations of the study, recommendations, implications, and the conclusion.

Chapter 2: Literature Review

The purpose of this qualitative phenomenological study was to explore and describe the lived experiences of effective virtual-team leaders regarding the different character attributes and operational strategies used to lead these virtual teams. The central phenomenon in this study was the lived experiences of virtual-team leaders.

This chapter includes a review of relevant literature concerning virtual-team leaders, the characteristics of effective virtual-team leaders, and leadership strategies used by successful leaders. This study of virtual-team leaders could lead to a better understanding of the characteristics and strategies that made the virtual-team leaders successful. The general problem was that most organizational leaders do not understand the need to manage virtual teams differently from traditional face-to-face teams (Quisenberry & Burrell, 2012). The specific problem was that some organizational leaders do not have effective strategies that drive the success of global virtual-team leaders. The gap in the research was the lack of information regarding the characteristics and strategies of virtual-team leaders that make them successful from the perspective of their lived experiences.

There is a substantial amount of literature on virtual teams, but the focus of much of the literature is on virtual teams from the point of view of the virtual team members. Goodman and Bray (2014) indicated that if virtual-team leaders have the knowledge, skill, and strategies to succeed in a global environment, the virtual teams will be successful. This research study included descriptions of the various character traits of

successful virtual-team leaders and the operational tactics used to lead these virtual teams.

This chapter includes literature on transformational leadership and LMX, which comprise the conceptual framework of this study. Also discussed are the creation and foundation of virtual teams, along with their historical background. The advantages and challenges of virtual teams precede a section on virtual-team leaders. This chapter discusses a review of the trust and communication of virtual-team leaders, along with the complex relationship between virtual-team leaders and team members.

Organizational leaders could use the results from this study for positive social change, as this study may shed light on the effective strategies used to lead virtual teams more successfully. Managers providing the best practices for leading virtual teams through trust, communication, and technology affect social change. The results from this study could support social change by breaking down barriers to the global market. Some of those barriers are cross-cultural, including? diverse virtual teams. Virtual-team leaders must effectively lead cross-cultural and diverse virtual teams in a global market.

Literature Search Strategy

The primary goal of the literature search was to review previous research on the issues under investigation in this study: virtual teams and virtual-team leaders; the characteristics and management strategies of virtual-team leaders, which included historical trends, empirical studies, and academic textbooks. The literature review included more than 150 peer-reviewed scholarly articles, in addition to dissertations and books.

The key terms initially used in the search were *virtual teams* and *virtual-team leaders*. The initial broad search of *virtual teams* yielded 22,827 peer-reviewed scholarly articles in ProQuest and EBSCOhost. The broad search of *virtual-team leaders* provided 9,268 peer-reviewed scholarly articles from ProQuest and EBSCOhost. Narrowing the search using different words and phrases pertaining to virtual teams and to articles published between 2012 and 2016 brought down the number of peer-reviewed scholarly articles. Including some older sources supported various aspects of the study. Other key terms used in the database search were *global distribution teams*, *leadership*, *virtual team effectiveness*, *distributed teams*, *leader-member exchange*, *LMX*, *LMX development*, *leaders*, *transformational leadership*, *transformational leaders*, and *knowledge management*, in various combinations. This iterative process was essential for searching and reviewing articles germane to this study.

Conceptual Framework

The conceptual framework for this qualitative study on successful virtual-team leaders included transformational leadership and LMX. For Burch and Guarana (2014), in transformational leadership and LMX, the leader can influence job satisfaction, job performance, and the behavior of the subordinates using different approaches. The focus of transformational leadership and LMX is on the relationship between the leader and the subordinate (Braun, Peus, Weisweiler, & Frey, 2013; Kangas, 2013). The focus of transformational leadership was on the leader's ability to inspire and influence subordinates to perform to the best of their abilities, which is like the concept of LMX. In many organizations with virtual teams, leaders do not have the proper skills to inspire and

influence subordinates; therefore, they cannot perform at a 100% level (Saarinen, 2016).

Communication is instrumental in getting leaders to perform at a higher level.

Communication by inspiring and motivating the subordinates can improve production through improving the relationship between the LMX relationship (Walther, 1995).

Leader–member exchange has a positive effect on the performance of subordinates, particularly within the team concept, and LMX can enhance members' influence on team decisions when maintained through frequent communication between the leader and other team members (Gajendran & Joshi, 2012). In most virtual team organizations, organizational leaders do not understand the LMX concept clearly (Saarinen, 2016). This lack of knowledge created the communication gap that existed between the leader and team members, which causes the organizations not to perform at full capacity. Researchers have conducted empirical studies that have shown that LMX has a positive association with work attitudes, job performance, and job satisfaction (Chan & Mak, 2012). Leader–member exchange was central to the job satisfaction of the employees and depends on the relationship between a leader and the subordinates (Malangwasira, 2013). The relationship between leader and subordinate is the key component of employees' positive behavior and positive attitude in LMX (Tangirala, Green, & Ramanujam, 2007). When employees received favorable treatment from their supervisor, they seemed compelled to reciprocate and equalize the exchange. The theories of transformational leadership and LMX served as this study's conceptual framework. However, some virtual team communication issues have caused some teams not to be successful.

Some organizations had virtual teams that have strategies that team members do not successfully execute. Many organizations have virtual teams that have been ineffective (Lepsinger & DeRosa, 2015). The ineffectiveness of virtual teams had primarily come from a lack of communication between the team leader and team members, which results in a lack of clear direction from the leader and a lack of clear roles among team members. The lack of face-to-face contact makes the process of establishing trust and relationships more difficult (Lepsinger & DeRosa, 2015). When virtual-team leaders and members understand the common challenges, organizational leaders can create strong, effective virtual teams.

Transformational Leadership

The term transformational leadership has existed for approximately 40 years. Burns (1978) first introduced the concept of transformational leadership. In transformational leadership, leaders and followers motivate each other to higher levels of morality. Transformational leadership improved the performance, morale, and motivation of both leaders and their teams. True leadership can change the people involved for the better and can create change and lead to goal achievement within the environment. Bass, a follower of Burns, developed the concept of transformational leadership further.

However, transformational leadership has not always been a positive form of leadership in virtual teams. Electronic communication plays a significant role in virtual-team leadership. Electronic communication can create its own challenges for virtual teams (Lepsinger, 2012). Lots of information can get lost when using electric communication in a virtual team setting. Therefore, because electronic communication

lacks in visual and auditory cues, transformational behaviors that are emotional may happen less frequently in virtual teams (Purvanova & Bono, 2009). These transformational behaviors were the essence of transformational leadership.

Followers inspired by leaders tend to perform better and give more effort to accomplishing required tasks. Bass (1985) defined transformational leadership in terms of how the leader affects followers, who should trust, respect, and admire the transformational leader. Transformational leadership involves intellectually motivating followers and encouraging them to learn innovative approaches of doing their work (Bass, 1985). In transformational leadership, followers feel involved in the organizational process (Leithwood & Jantzi, 2005). The leaders make followers feel like part of the team, which allows the leaders to be creative and instrumental in the success of the organization. Leaders who are motivating and encouraging toward followers can lead to followers gaining trust in the leaders. Trust of the leader by followers and team members is an important part of transformational leadership. However, with virtual teams, the lack of face-to-face contact between the leader and team members can make it more difficult to establish trust (Lepsinger, 2012). In many organizations, all employees have not effectively followed the notion of virtual-team leaders and members. For example, with virtual teams, it is important for team members to understand their individual roles, especially who their supervisor is (Lepsinger, 2012). A lack of clear roles among team members can have a major effect on virtual teams.

A link exists between transformational leadership and trust. A key concept that is significant to effective transformational leadership is the development of follower trust in

the leader (Zhu, Newman, Miao, & Hooke, 2013). One definition of transformational leadership is a process in which leaders bring encouraging changes and develop trust in employees, teams, and organizations (Warrick, 2011). Employees trust in their transformational leaders, which is a crucial factor that motivates employees to spend more time on required tasks and to perform beyond standards (Asencio & Mujkic, 2016). The behavior of a leader can foster or diminish trust (Browning, 2014). Therefore, leaders should ensure they use trust to foster positive behavior in the followers.

Trust in the leader is an important role in the success of virtual teams. Trust is a major concern facing virtual teams (Guinaliu & Jordán, 2016). The leadership of virtual-team leaders has a primary role in the success of the virtual team. Therefore, the significance of trust in team leaders takes on a different meaning with virtual teams (Guinaliu & Jordan, 2016). Virtual-team leaders are often not collocated with many of their team members; thus, trust can become more challenging to virtual teams. Virtual-team leaders can foster trust from subordinates through the idea of benevolence (Braun et al., 2013). Team leaders who show interest in each subordinate's goals, interests, and involvement earn the trust of the individuals.

Along with the trust factor developed by leaders with followers, leaders also need to be excellent motivators. Organizations need to have leaders who can encourage and motivate followers to perform at elevated levels. To thrive in a global environment, leaders need the ability to motivate their followers to achieve organizational goals and objectives (Childers, 2009). Transformational leadership may provide the means to achieve these goals. Hoch and Kozlowski (2014) indicated that transformational leaders

use inspiration and motivation to get employees to conform to their interests to achieve organizational goals. A transformational leader demonstrates behavioral integrity, which allows trust with followers to develop. Hoch and Kozlowski noted that organizational leaders use transformational leadership more often with virtual teams. Transformational leadership enhances team performance in several organizational settings, because the leaders excel in motivating and inspiring the team members.

The transformational leadership style can be successful for managers working with virtual teams. Lepsinger (2012) mentioned that leadership is the factor most important to the success of virtual teams. In virtual teams, team members feel encouraged when there is positive motivation from the leader. Transformational leaders create visions and motivate team members to go beyond their normal expectations to reach their desired objectives (Aarons, 2006). Virtual team members respond positively to a transformational leadership style (Yavirach, 2012). Transformational leaders create an atmosphere of openness and trust and get team members to relax and perform their best. However, ineffective training of leaders is one of the reasons virtual teams are not successful. To be effective, virtual-team leaders need to be sensitive to cultural and communication factors to overcome the distance limitations of virtual teams (Lepsinger, 2012). With effective training, transformational leaders can develop team-building, communication, and interpersonal skills to lead virtual teams successfully.

Transformational leaders make the changes needed for organizations to be successful. Transformational leaders accomplish organizational objectives best during times of unpredictable economic, political, and technological changes (Warrick, 2011).

These types of leaders create and develop the atmosphere necessary to achieve the tasks required to be effective. A positive effect on organizational culture set by transformational leaders can lead followers to perform their jobs at a high level (Moynihan, Pandey, & Wright, 2012). In transformational leadership, virtual-team leaders emphasize team identity, team building, and a team vision that builds trust in team members. Transformational leaders possess the courage, ability, and fortitude to accomplish the desired goals of the organization.

Transformational leaders have the ability and skill level to motivate virtual team members to be successful. Transformational leadership is the most applicable and effective form of leadership for virtual teams (Mukherjee et al., 2012). Burch and Guarana (2014) indicated that transformational leadership tends to have a focus on the ability of a leader to transform employees through a global inspirational vision that can inspire positive change among employees. Transformational leaders have the potential to be successful virtual-team leaders because of this ability. Dabke (2016) noted transformational leaders have the knowledge to create and develop the strategies necessary for virtual team members to be productive and to ensure the team members are following similar procedures and practices. Leader–member exchange is another theory, along with transformational leadership, that is important to the success of virtual teams and virtual-team leaders.

Leader–Member Exchange (LMX)

The concept of LMX has existed for more than 50 years. The theoretical approach of the LMX appeared in the writings of Graen (Winkler, 2010). The basis of LMX was

the idea of three leadership facets: leader, follower, and relationship (Graen & Uhl-Bien, 1995). The four stages of LMX in the beginning were vertical dyad linkage, LMX, leadership making, and team making (Graen & Uhl-Bien, 1995). Leader–member exchange theory includes an assumption that leaders and followers are in an exchange relationship. The leaders get something from the followers, and, in turn, the followers follow because they receive something from the leader (Winkler, 2010). The goal of LMX theory is to describe the effects of leadership on followers, teams, and organizations (Gajendran & Joshi, 2012). Leader–member exchange is similar to transformational leadership, as both indicate leaders should develop strong trust, emotional, and respect-based relationships with members of a team. A major difference is that in LMX, a trusting, respect-based relationship does not exist with all team members (Xu, Huang, Lam, & Miao, 2012). Based on the LMX theory, leaders do not treat each employee the same. The work-related behaviors of employees depend on the relationship with the employee and the leader.

The various relationships between leader and employees lay the foundation for how teams operate. Leader–member exchange includes an emphasis on the significance of the unique leader–employee relationship as the key component of positive employee behavior and attitudes (Burch & Guarana, 2014). Wilson et al. (2010) noted that the focus of the LMX theory is on the relationship developed between leader and member and based on trust, respect, loyalty, and support. The relationship between a leader and a subordinate is the foundation of leadership (Kangas, 2013). Most LMX research includes a focus on the outcome of the members. Wilson et al. focused on the effect of LMX on

the leader. By understanding how LMX affects leaders, significant improvement for LMX theory and virtual teams may develop.

Leader–member exchange has a significant role in virtual teams. As organizations have become more global, technology continues to expand, and virtual teams are growing. The leader–member relationship can significantly influence the work performance of a member (Goh & Wasko, 2012). Global communication is important, and its growth affects LMX. Some members of virtual teams often feel isolated and excluded from activities and decisions made by their teams (Gajendran & Joshi, 2012). The leaders of globally separated teams are responsible for the communication process and for keeping all members involved in the decision-making process, which becomes a critical responsibility of virtual-team leaders. Building on LMX theory, I proposed that higher quality leader–member relationships have a direct effect on the degree to which leaders allocate members and develop resources. Therefore, transformational leadership and LMX build organizational trust and effective communication.

Rationale for Conceptual Choice

Transformational leadership and LMX both provide a solid framework from which I can develop a better understanding of virtual teams. Researchers have demonstrated that when there is positive communication between the leader and the team members, teams work more effectively (Lepsinger & DeRosa, 2015). The framework for this study is effective leader–team member communication. Poor communication, including a lack of clear team roles and team direction, is a common reason that virtual teams are not successful. Transformational leadership and LMX concepts indicate that

leaders can influence the behavior and job satisfaction of team members. Both conceptual frameworks highlight the leader–team member relationships as a key element of members' positive behavior and attitude. When team leaders are effectively trained, transformational leadership and LMX are essential to the success of virtual teams and virtual-team leaders.

Literature Review

Virtual Teams

Virtual teams have been increasing in the business world. There are numerous definitions of virtual teams. Collins et al. (2014) defined virtual teams as workgroups cooperating in a virtual environment and using computer-based communication to accomplish the goals of an organization. Altschuller and Benbunan-Fich (2013) described virtual teams as geographically separated work groups that communicate electronically to accomplish work. A virtual team is a group of people working interdependently with a shared purpose across space, time, and organizational boundaries using technology (Aiken et al., 2013). Conine (2014) defined virtual teams as small groups of geographically dispersed knowledge employees who coordinate work with electronic information. Virtual teams include employees in different geographical locations (Ferrazzi, 2014). Virtual teams interact with each other and do not meet in a face-to-face setting. The diversification of organizations in the global market led to the formation of virtual teams. The business world requires project teams that are creative, dynamic, and flexible. Virtual teams fit this organizational concept.

Virtual teams may span different boundaries, time zones, space, and cultures. Organizational leadership must consider the cultural differences of the different team members. Hoch and Kozlowski (2014) noted that cultural differences are a significant element in virtual teams. Global virtual teams may not share a common language, time zone, or country because the teams are in various locations (Rabotin, 2014). When virtual team members from different cultures work together, the potential for misunderstanding and miscommunication can be high (Berg, 2012). Rabotin (2014) indicated that organizations with global connectivity have access to the best employee talent in the organization without any geographic restrictions. Virtual teams obtain the best employees by recruiting and hiring employees who are unwilling or unable to relocate (Quisenberry & Burrell, 2012). Members of global virtual teams may live around the world; therefore, effective communication is crucial to the success of these teams.

Virtual team members must be aware of the cultural and language differences, particularly during the communication phase when team member gestures and nonverbal behavior could increase cultural misunderstandings and misinterpretations from other team members. Berg (2012) noted that virtual team members could gain a better communication perspective by learning and understanding the different communication styles of team members from other countries. Virtual team members understand their own cultures, but the team members need to make progress to understand other team cultures to be effective (Duran & Popescu, 2013). Global virtual teams require more team communication than collocated teams. Therefore, global virtual-team leaders should emphasize communication among team members (Dennis et al., 2014).

The increase in the globalization of businesses created the dispersion of teams in different geographic areas (Barnwell, Nedrick, Rudolph, Sesay, & Wellen, 2014). Virtual teams provide the flexibility to cope with competition in the global economy (Chyng-Yang, 2013). Organizational leaders develop virtual teams to gain competitive advantages in global markets. These forward-thinking leaders understand the significance of developing virtual teams. Multinational corporations are a common occurrence in the virtual and global markets.

Historical background of virtual teams. During the 1990s, virtual teams became popular in organizations whose leaders realized the need to become globally competitive (Bergiel et al., 2008). Virtual teams allow communication and interaction beyond face-to-face meetings, and team members can communicate across borders without having to leave their offices. During the early stages of virtual teams, communication took place via conference calls (Bergiel et al., 2008). Global virtual teams could cross boundaries and cultures to become a viable option for communication within organizations (Aiken et al., 2013). Virtual teams also give organizations an opportunity to grow and become successful in the global marketplace.

Virtual teams that communicated mainly by telecommunications and information technologies began increasing rapidly during the early 2000s (Bergiel et al., 2008; Govindarajan & Gupta, 2001). Lepsinger and DeRosa (2015) described three of the main reasons for the increased popularity of virtual teams as (a) the desire to use the best available people on a project, (b) the need to locate key people closer to geographically

dispersed markets to enhance performance and customer satisfaction, and (c) the availability of technology to facilitate virtual collaboration.

Virtual teams have increased in importance to organizations because organizations need a global market presence and to gain a better understanding of these teams. There have been many definitions of virtual teams. Conine (2014) defined virtual teams as small, temporary groups of geographically or time-dispersed workers who coordinate their work primarily with electronic information and communication technologies to achieve one or more organizational task. Aiken et al. (2013) described a virtual team as a group of people working interdependently with a shared purpose across time, space, and organizational boundaries using technology. Smite, Kuhrmann, and Keil (2014) defined virtual teams as groups of geographically separated workers who use information or technology to accomplish specific tasks. Virtual teams depend on the Internet, computers, smartphones, and other electronic devices for routine communications because of the varied geographic locations and time differences (Cowan, 2014). Organizational leaders recognize the effect virtual teams can have on the success of an organization globally.

Organizational leaders need to understand the global market to be successful. Organizational leaders understand the significance of having a place in the global economy; consequently, they develop virtual teams. Virtual teams are now common in the global workplace environment, and the globalization of organizations makes virtual teams a necessity (Conine, 2014). Virtual team members are geographically separate and use technology to communicate with each other from various locations around the world

(Cowan, 2014). Understanding the global economy is vital to organizational business success overseas. Organizations now have virtual teams to gain a competitive advantage in the global market.

The success of organizations depends more on global market performance than in previous times. The expansion of organizations worldwide makes the importance of global market success a reality. Virtual teams play a significant role in the strategies of productive organizations. Organizations have virtual teams, and due to communication advances and other types of information technology, the labor force has spread to global markets. Virtual teams are a key component of the workforce environment in the 21st century (Cramton & Hinds, 2009). Organizations have globally located businesses, and leaders communicate with these globally distributed teams or virtual teams. Organizational leaders must communicate and coordinate in a timely manner to ensure success.

Virtual teams have developed as an important part of organizational strategy. Organizations have businesses located in various parts of the world, and virtual teams are critical to the productivity of organizations. Virtual teams collaborate and work together, even though the teams are geographically separate. The teams are technologically involved in the organizational decision-making process. Advancements in technology and advances in the global economy affect the success of businesses in the global market. Goodman and Bray (2014) indicated that employees work for global corporations, and virtual teams are cross-cultural and interactive in technological locations. In global business, virtual teams continue to improve technological advancement (Gajendran &

Joshi, 2012). The geographic separation of virtual teams leads to the teams using more technology to coordinate and collaborate.

Virtual teams are commonplace in the business arena. Collaboration, communication, technology, and trust are major factors in the success of globally distributed teams (Charlier, Stewart, Greco, & Reeves, 2016). Organizational leaders realize the significance of virtual teams and the need for these teams to be effective and productive. With the advent of the Internet and other technological advances, organizational leaders could take advantage of virtual teams.

Advantages. Virtual teams give organizations different advantages. One advantage of virtual teams is that the organizations can increase operations globally without incurring unnecessary costs (Quisenberry & Burrell, 2012). Virtual teams give organizational leaders the opportunity to increase their organization's visibility in the global economy by having a global presence. Snellman (2013) noted that one of the most common reasons that organizational leaders form virtual teams is to overcome geographic separations and to cut travel time and costs. Travel time and cost are substantial expenses for organizations with various locations, and virtual teams significantly reduce these two features. Other advantages of virtual teams are unifying functions across an organization and incorporating employees who come to an organization from mergers or acquisitions (Snellman, 2013). All the advantages mentioned can improve organizational efficiency. By improving efficiency, organizational leaders can save costs.

Another advantage of virtual teams is the reduction of travel time and cost. The significant expenses of daily travel decrease because virtual teams communicate with technology (Bergiel et al., 2008). In virtual teams, face-to-face meetings occur less often, which also reduces the level of disruption to everyday life (Snellman, 2013). Reducing travel time and daily disruptions can save money.

Cultural diversity is another advantage of global virtual teams. Because global virtual team members are all over the world, cultural diversity is instrumental to the success of virtual teams (Snellman, 2013). Snyder (2015) indicated that cultural diversity affects group decision making, which can be positive for teams. Individuals from diverse cultural backgrounds tend to participate actively in virtual team group decisions and discussions (Snellman, 2013). Virtual teams create equal opportunities in the workplace (Bergiel et al., 2008). Bergiel et al. (2008) also noted that virtual teams discouraged age, race, and disability discrimination because members of virtual teams interact with other team members with various backgrounds. The performance of employees depends on their productivity. When virtual team members understand a team's cultural diversity, the relationship between team members from diverse cultures can improve. Along with the various advantages, virtual teams also have some challenges.

Challenges. Virtual teams entail challenges that can affect organizational success. Organizational leaders need to understand the biggest challenges facing virtual teams and the key practices for overcoming those challenges (Dennis et al., 2014) to get the most productivity out of the virtual teams. The number of virtual teams in organizations around the world has increased (Aiken et al., 2013). However, many organizations have not

devised an effective strategy for virtual teams to be successful. Lepsinger (2012) reported that more than 25% of virtual teams were not performing at their full capability.

Another challenge that could affect virtual team performance is cultural diversity. Cultural diversity can be an advantage, but it can also be a challenge. For example, there could be communication issues with culturally diverse virtual teams (Han & Beyerlein, 2016). Han and Beyerlein (2016) reported that language barriers between culturally diverse teammates could be a challenge to virtual-team leaders. Cultural differences between virtual team members can lead to conflicts, most notably mistrust among the workers (Dennis et al., 2014). Cultural diversity can lead to another challenge for virtual teams, which is communication.

Communication is imperative for the success of virtual teams, and language barriers among virtual team members can be detrimental to the success of virtual teams. Virtual team members can have issues interacting because of communication and language barriers (Han & Beyerlein, 2016). Language written in e-mails can increase negative perceptions among team members (Han & Beyerlein, 2016). Spelling and grammatical errors, along with word misinterpretations, can lead to confusion among team members. Virtual teams can represent various countries with various languages; therefore, language differences can be a challenge for virtual teams. Virtual team members must overcome the language differences to be successful. Other challenges can also affect virtual teams.

Virtual team members also face social isolation as a challenge. Duran and Popescu (2013) noted that the lack of face-to-face interactions with others adversely

affects many virtual team members. Most communication in the virtual team environment is task oriented (Levasseur, 2012). Therefore, social communication is not the basis of most communication with virtual teams. The work environment is an important socializing factor for many workers, particularly with many workplace colleagues normally interacting face-to-face with each other (Duran & Popescu, 2013). This social interaction with other employees is not available among virtual teams, which could be counterproductive and could lead to worker stress. Organizational leaders who provide teams with a clear leadership approach, training, better role clarity, and an effective communication strategy can help to overcome the challenges faced by virtual teams (Levasseur, 2012). Organizational leaders and virtual teams need to be ready for the challenges that arise. Virtual-team leaders need to have a plan for overcoming the challenges, as well as to understand the advantages, of virtual teams.

Virtual-team Leaders

Taking a place in global markets has become more common for many organizations. Coca-Cola, Nike, and World Wildlife Foundation are three successful global organizations. A successful global presence is possible for any business that has a creative strategy and an understanding of global markets (Fleishman, 2015). With the globalization of the business world, there is a high demand for global leadership (Terrell & Rosenbusch, 2013). The role of the global virtual-team leader is vital to the success of globally distributed teams. Organizational leaders use virtual teams to gain a competitive advantage in the global market. However, one of the most essential challenges that organizational leaders face is developing leaders with the necessary skills to succeed in

the global environment (Dennis et al., 2013). Virtual-team leaders may require a different skill set from traditional face-to-face team leaders.

Numerous leadership and management skills are necessary to become an effective global virtual-team leader. One of the primary skills a global virtual-team leader needs to possess is the ability to work effectively with members from diverse cultures (Caligiuri, 2013). Dennis et al. (2013) noted virtual leaders need to develop leadership styles that will effectively work with team members from diverse cultures. The overarching idea is that virtual-team leaders need more knowledge and leadership abilities than face-to-face traditional leaders. Virtual-team leaders may need stronger communication skills, more patience, more knowledge of technology, and more knowledge of team dynamics (Dennis et al., 2013). By having these skills, virtual-team leaders can build trust in the team early.

Organizations have geographically distributed teams that communicate mainly by telecommunications and information technologies (Levasseur, 2012). Leaders have complete influence over the frequency of communication between leaders and members. Leaders can determine the quality of communication with members, as well as the frequency of communication (Maxfield, 2014). Leaders also set a positive example and determine the status of the leader–member relationship. Leaders must proactively build relationships with the members (Newell, David, & Chand, 2007). The leaders of globally separated teams are responsible for the communication process and for keeping all members involved in the decision-making process. Virtual-team leaders play a vital role in fostering innovation in these globally distributed teams (Gajendran & Joshi, 2012). Leaders must enable members to have an influence on team decisions with the frequency

of communication among team members. Trust and communication are the two factors that virtual-team leaders need to master to be successful with virtual teams in the global market environment.

Trust with virtual-team leaders. Trust is a critical factor with virtual teams, and members build virtual team relationships on trust. Browning (2014) defined trust as a willingness to depend on another person, as well as an expectation that the other person will respond if needed. The relationship between the virtual-team leader and the team members is vital to the success of the team. Virtual team members come from various backgrounds; therefore, trust is an impactful portion of organizational success (Gladden, 2014). Building teamwork, trust, and collaboration among virtual team members sets the tempo for the team leader. Virtual-team leaders cope with these difficult concerns and overcome the concerns to be effective (Crisp & Jarvenpaa, 2013). Virtual-team leaders also rely on the trust of team members toward the team leaders (Bergiel et al., 2008). Team leaders supervise teams, and trust is necessary in the relationship.

The trust shown by virtual team members toward the team leader is crucial to the success of the team, because trust is necessary for the security and comfort of the team. The team leader fosters trust among virtual team members in an organizational setting (Altschuller & Benbunan-Fich, 2013). Trust affects virtual teams in a positive manner and can affect the performance of the team. Trust on virtual teams improves when there is positive knowledge management and knowledge transfer between team members (Goodman & Bray, 2014). Goodman and Bray (2014) noted that trust forms when virtual teams effectively manage and transfer knowledge with each other.

Trust is vital to the security of team members while working together. Trust between the virtual-team leader and virtual team members is significant. Global organizations have an important challenge, which is how to establish trust and collaborative relationships successfully in teams distributed in different countries. Goodman and Bray (2014) and Chyng-Yang (2013) concentrated on collaboration and trust among virtual teams. Leaders of business organizations must understand the use of the technological environment to benefit from virtual teams. Trust increases knowledge management, knowledge sharing, and collaboration within virtual teams, and the challenges involved prevent many virtual teams from being productive and effective. Organizational leaders must overcome these challenges to be successful in the global market environment. Trust is a major element in virtual team performance.

Virtual teams have quality relationships, and the performance of the team is better when there is trust within the team. Trust between virtual-team leaders and virtual team members is a critical facet in organizational effectiveness. Trust also plays a primary role in communication between virtual-team leaders and members.

Communication with virtual-team leaders. Virtual-team leaders need to develop a plan of action for communicating with team members, especially when team members speak different languages. Managers and virtual-team leaders should adopt practices that encourage collaborative communication that maximizes team interaction (Espinosa, Nan, & Carmel, 2015). Collaborative communication could help team members who speak different languages if team members learn various communication styles. Communication frequency by team leaders is important in the virtual team

environment (Schmidt, 2014). Virtual teams perform well when there is effective and frequent communication between the team leader and team members. Communication frequency should increase when team members speak different languages (Schmidt, 2014). Language barriers can exist between virtual team members; therefore, team members need to increase the amount of communication to avoid misinterpretations (Duran & Popescu, 2013). Along with frequent communication, higher quality leader–member relationships can have a significant effect on the performance of the members (Goh & Wasko, 2012). Frequent communication allows better coordination and collaboration with virtual teams from other organizations. Virtual teams establish more productivity and innovation within organizations when communication frequency increases.

Another primary concept with virtual teams is the communication aspect between leaders and members. The type of communication between leader and member and the amount of communication are factors in job performance. When there is a high-quality and high-quantity communication relationship with virtual-team leaders and team members, the team leader performs better and has a greater effect on team decisions (Gajendran & Joshi, 2012). Communication between these teams is always a challenge. Webs of information and telecommunication technology enhance virtual team communication (Rabotin, 2014).

Knowledge transfer is a main factor in communication for virtual teams. Teams transfer knowledge and information across numerous time zones to other virtual team members (Jawadi & Bonet-Fernandez, 2013). Communication between the teams is a key

component of the success of globally distributed teams. Communication can lead to trust and knowledge sharing (Giuffrida & Dittrich, 2015). Trust and knowledge sharing are instrumental in the success of these global teams. Virtual-team leaders need to keep team members motivated and encouraged. A motivating factor in the performance of virtual teams is successful and effective knowledge transfer (Gonçalves, Ferreira, Gonçalves, Putnik, & Cruz-Cunha, 2014). These motivating factors serve as instrumental features in the performance of virtual team members (Gonçalves et al., 2014). Knowledge transfer between virtual teams is challenging, but if done effectively, can generate productive results. Communication and information technologies are responsible for successfully collaborating between virtual teams.

Virtual-team leaders understand that collaboration with members from other teams must occur with teams from around the world. Virtual teams collaborate with team members from various parts of the world, particularly when making difficult decisions (Chyng-Yang, 2013). Research on knowledge transfer is constantly developing. Knowledge transfer is a process in which organization leaders learn detailed information in another organization and reapply this information in other organizational situations (Gajendran & Joshi, 2012). Knowledge transfer research shows improvement in both depth and applicability (Rabotin, 2014). Rabotin (2014) noted that knowledge transfer researchers recognize and understand the importance of motivation, organization, and trust in communication. Virtual teams must trust each other to manage, share, and transfer information to each other. Knowledge management works when there is trust

between virtual-team leaders and members, and the members understand the significance of the information transferred.

Virtual Team Members

Organizational leadership is aware of the significance of virtual teams and virtual team members, as well as the requirement for these teams to be successful. The technological advances, the importance of the Internet, and the influences of the global economy have had a major effect on the status of global markets in the business world (Goodman & Bray, 2014). These factors are significant in the productivity, collaboration, and coordination of virtual team members. The relationship with a team leader and virtual team members should be positive for organizations to be productive (Gaan, 2012). The success of virtual teams can depend on the relationships between the virtual-team leader and the team members. Tangirala et al. (2007) noted that when supervisors have a positive relationship with their boss, the supervisors also have a positive relationship with their employees. The supervisor–employee relationship can also depend on the feedback received by employees.

Employees often search for ways to improve their performance. One way for employees to improve is in their responses to supervisor feedback. The feedback-seeking behavior of employees affects the leader–member relationship in the workplace (Lam, Huang, & Snape, 2007). Scandura and Pellegrini (2008) indicated that the significance of employees proactively seeking feedback and how that feedback influences the leader–member relationship can have positive effects on an organization.

Trust with virtual team members. Trust in virtual-team leaders is a key factor in working toward success for team members and organizations. Virtual team members trusting the team leader is instrumental in accomplishing team goals (Kuesten, 2013). Altschuller and Benbunan-Fich (2013), Benetytė and Jatuliavičienė (2013), and Chyng-Yang (2013) discussed virtual-team leaders developing trust with virtual team members. In addition, trust is vital to team coordination, chemistry, and motivation. Bergiel et al. (2008) noted that virtual team members need to trust in the leader to achieve the goals of the organization in a global market. Virtual team management depends on the trustworthiness of the team leader. Barnwell et al. (2014) and Garcia (2014) focused on virtual-team leaders' individual abilities and knowledge. The trust shown by virtual team members toward the team leader is crucial to the success of a team.

Trust can become a difficult issue when it comes to working with a global virtual team. Team members are in various parts of the world with different views and cultures. Therefore, trust becomes an impactful concept for teams. Newell et al. (2007) found that trust is hard to establish while on a global team. When there is no trust, knowledge sharing and knowledge transfer becomes problematic (Scandura & Pellegrini, 2008). Leaders should build relationships with their members to gain trust with the team and with the other team members. Trust is something that global teams must earn.

Global virtual-team leaders build trust by developing relationships with team members. Team leaders can have on-on-one meetings with the team members and work alongside the team, when feasible, to help develop relationships and build trust (Hart, 2016). From an organizational perspective, trust is a critical factor in employees and

managers working in teams successfully (Abu Mansor, Mirahsani, & Saidi, 2012). Along with trust, communication between virtual team members and the virtual-team leader is instrumental in the success of the team.

Communication with virtual team members. Communication from a team leader is an important aspect in the performance of global virtual team members. Gajendran and Joshi (2012) looked at communication between the leader and team members and noted that high-quality leader–member communication is effective and creates positive involvements in team decision making. When communication is low quality, member involvement decreases. Therefore, the leader–member relationship should remain frequent and positive. Goh and Wasko (2012) also looked at the quality of the leader–member relationship. High-quality leader–member relationships lead to high team performance (Jawadi & Bonet-Fernandez, 2013). High-quality communication also leads to more rewards, more communication with the leaders, and more resources (Goh & Wasko, 2012). Positive and frequent communication from a virtual-team leader enhances team member satisfaction and work performance.

Team members tend to work better when communication with the team leader is high level and frequent. Dynamic and positive leadership is important in enhancing the relationship between team members (Jawadi & Bonet-Fernandez, 2013). Teams are willing to transfer and share knowledge and information when a certain level of trust exists. Sharing knowledge improves the effectiveness and efficiency of virtual teams (Gurursamy & Balaji, 2013). Knowledge sharing is crucial for any team, but when team members are in different countries and different time zones, communication is especially

important (Gurursamy & Balaji, 2013). Therefore, communication and knowledge sharing are vital to the success of virtual teams and the members. The ability to communicate effectively is a key leadership characteristic for virtual-team leaders, but it is not the only effective leadership characteristic held by virtual-team leaders.

Leadership Characteristics

Different characteristics of virtual-team leaders are effective and successful. The leader of the virtual team is critical to the success of the virtual team (Eissa, Fox, Webster, & Kim, 2012). When organizational leaders understand the lived experiences of successful virtual-team leaders, these organizational leaders can determine the leadership characteristics necessary for managers to lead virtual teams effectively (Dabke, 2016). Then the organizational leaders can establish criteria to select candidates qualified as effective virtual-team leaders. Organizational leaders can apply the best procedures to create effective virtual-team leaders and virtual teams. Virtual-team leaders need to understand the relationship between the leader and the team members.

Virtual-team leaders in different regions from their team members must find ways to bring in and keep their multinational corporations working together. Some virtual-team leaders bring in interpreters to help with the differences in language (Maude, 2011). Interpreters should be capable of clearing up the cross-cultural misunderstandings by providing appropriate explanations of gestures (Maude, 2011). Interpreters can improve the communication of multinational virtual teams. Leadership styles in Eastern Europe are more autonomous, and most Western leaders look negatively at the autonomous leadership style (Nichols & Yildirim, 2014). Leaders who provide more autonomy for the

team members give them the ability to take care of the tasks more effectively (Slade, 2015). Virtual-team leaders understand that multinational team members may prefer different leadership styles. The relationship between the virtual-team leader and the virtual team members is significant.

Virtual-team leaders need to understand the leader–member dynamic. Virtual-team leaders work with members from various cultures and backgrounds (Stahl & Brannen, 2013). Virtual-team leaders need to demonstrate ethical leadership toward employees from diverse cultural backgrounds. Business organizations are globalizing, and teams are in locations around the world (Eisenbeiß & Brodbeck, 2014). Virtual teams function better when the leader–member relationship is of high quality. One of a virtual-team leader’s primary responsibilities is to provide team members with the resources necessary to accomplish the work requirements (Goh & Wasko, 2012). The allocation of resources given to virtual team members by virtual-team leaders affects the quality of the leader–member relationship.

The leadership style of virtual-team leaders has a strong influence on virtual team members. The culture of a society has a strong effect on the virtual-team leadership style (Nichols & Yildirim, 2014). The leadership style of virtual-team leaders also affects the culture of an organization. The cultural and physical distributions of virtual teams play an instrumental role in the leadership style of different virtual teams (Fan, Chen, Wang, & Chen, 2014). Organizational leadership is continuing to acquire more information on virtual-team leaders and the attributes that make these leaders successful. The more data that organizational leaders gain concerning traits of effective virtual-team leaders, the

better the potential for productivity and success rates of virtual team projects (Eissa et al., 2012). Virtual-team leaders need to use their leadership characteristics to collaborate with each member of the virtual team (Avolio, Sosik, Kahai, & Baker, 2014). Leaders should develop and create strategies that will make the team successful and effective.

Management Strategies

Managing virtual teams leads to more issues than managing traditional teams in business. Virtual-team leaders face challenges and obstacles that require different ways to manage virtual teams, unlike leaders of team members in the same location (Reed & Knight, 2010). Virtual teams are commonplace in the global environment, and organizations need to be successful in the global market (Dennis et al., 2013). Virtual-team leaders must take on different responsibilities than leaders of traditional face-to-face business teams. Team factors such as trust, communication, collaboration, and relationship building become more difficult in the virtual team environment (Malangwasira, 2013). When virtual teams accomplish these factors, organizations gain many benefits. Some benefits for virtual teams include the development of subject matter experts spread across time and space, staff flexibility, and travel cost savings (Hoch & Kozlowski, 2014). These benefits support the organization and virtual teams.

Building relationships and coordinating are more challenging with virtual teams because of the diverse cultures of the team members. Managers and leaders are working with virtual teams and diverse cultures more often (Stahl & Brannen, 2013). The leader of the virtual team is responsible for the management of the team. The team should have faith and confidence in the team leader to be effective and lead them to success.

Therefore, when leaders have confidence in their virtual team members, the members feel trusted and valued and will hold their work to a higher standard (Slade, 2015). Teams work better together when there is mutual confidence, trust, and communication.

Successful communication and interaction with virtual team members by a leader leads to being an effective leader. The ability to communicate with the team demonstrates a key leadership trait that the virtual-team leader must display. In the global market, team leaders can communicate with team members despite being in various parts of the world. Gajendran and Joshi (2012) and Pitts, Wright, and Harkabus (2012) examined the significance of communication in the success of virtual teams. Communication is one of the major factors in the success of virtual teams; however, other factors can also influence the effectiveness of virtual teams, such as ethical leadership.

Ethics in leadership should be at the center of business organizations. Eisenbeiß and Brodbeck (2014) mentioned that leaders need to demonstrate ethical leadership toward employees from diverse ethical backgrounds. Virtual-team leaders need accurate knowledge about cross-cultural differences and commonalities between ethical leadership and unethical leadership (Guillemette & Golden, 2012). Ethical leaders must have excellent collaboration skills to work with the team members to ensure productivity is effective. Regarding management style, ethical leaders display great people orientation and lead others by example (Eisenbeiß & Brodbeck, 2014). Virtual leaders can lead by encouraging and inspiring others and by having a clear vision for the future. This type of leadership builds trust and leads to team cohesion.

Virtual teams are geographically separate; therefore, team leaders need to develop a sense of unity with team members. Unity or cohesion depends on a leader's ability to create a shared vision of goals and provide a blueprint for the vision (Slade, 2015). One version of team cohesion is that team members sacrifice and collectively strive to meet a common goal (Quisenberry & Burrell, 2012). Leaders should build group cohesion and encourage individual commitment (Grinnell, Sauers, Appunn, & Mack, 2012). Quisenberry and Burrell (2012) noted that establishing trust and cohesion on virtual teams is a major contributing factor to team performance. Establishing trust fosters an environment of group cohesion and a commitment to accomplish all assigned tasks when virtual-team leaders demonstrate trust in their team members (Slade, 2015). These strategies can promote team member participation and empowerment.

Gaps in the Literature

Research on successful and effective virtual teams and the perceptions of virtual-team leaders is lacking. Many researchers have conducted research on virtual teams from the perspective of the virtual team members (Rabotin, 2014). A growing body of research indicates how effective virtual-team leaders engage in interactions with their teams. However, researchers do not know how to identify candidates for leadership positions who have high potential to become engaged virtual leaders (Iorio & Taylor, 2015). In virtual teams, the gap in the research is the lack of information regarding the characteristics and strategies of virtual-team leaders that make them successful from the perspective of their lived experiences. There have also been concerns regarding the lack of effective training programs for virtual-team leaders (Mandzuk, 2014). Mandzuk (2014)

noted that training virtual-team leaders can involve numerous challenges, such as working with diverse cultures and developing communication skills to work with the various teams.

There is a difference in training virtual-team leaders compared to traditional face-to-face leaders. Organizational leaders do not completely understand that leaders should manage virtual teams different from traditional face-to-face teams (Quisenberry & Burrell, 2012). In a study on comparing leadership in face-to-face and virtual teams, Purvanova and Bono (2009) indicated that communication in virtual teams is more confusing and difficult than face-to-face communication. Virtual teams use e-mail, instant messaging, and other technology to communicate with team members. Many researchers have looked at leadership in traditional teams, but there is a gap in research regarding behavior exhibited by effective virtual-team leaders (Iorio & Taylor, 2015). The way virtual-team leaders accomplish their tasks and the constraints they face along the way is essentially different from traditional leaders.

Organizations have virtual teams to compete in the global market. These teams need to have strong virtual-team leaders to be effective. Leadership is the most important factor in virtual team success (Lepsinger, 2012). Iorio and Taylor (2015) noted that leadership characteristics, behavior, and tactics need reevaluating in the virtual team environment because some characteristics can become more relevant than in the traditional environment. I conducted this study to address the gaps in information by focusing on factors to improve ineffective leadership and lack of effective training programs for virtual-team leaders. I also paid attention to developing constant virtual

team communication. Therefore, the purpose of this qualitative phenomenological study was to explore and describe the lived experiences of effective virtual-team leaders regarding the different character attributes and the operational strategies used to lead these virtual teams.

Summary and Conclusions

This chapter included insight concerning virtual-team leaders, the characteristics of effective virtual-team leaders, and successful leadership strategies. This chapter involved exploring the difficulty conceptualizing transformational leadership and LMX into virtual-team leadership training and the significance of trust and communication within virtual teams and with the team leader. The virtual-team leader–team relationship is complex and difficult to develop. Therefore, an effective leadership strategy for virtual-team leaders is vital, as is selecting the correct personnel to lead the virtual teams.

Virtual teams are common in the global workplace environment. They are important because organizations understand the significance of having a place in the global economy. Virtual team communication provides the key to success in the global economy. Successful communication in virtual teams is crucial to the effectiveness of these teams on a global scale. Knowledge management and knowledge transfer are the by-products of trust and communication within virtual teams and are instrumental to the success of global teams.

The relationship between the virtual-team leader and the team members is important. The virtual-team leader influences the frequency of communication within the

team. The leader also determines the quality and the quantity of communication with members. The leader proactively builds positive relationships with the members.

More information is emerging on virtual teams because these teams are increasingly common in organizations. Organizational leaders understand what is necessary to make virtual teams successful. The existence of better relationships between virtual-team leaders and team members affects team performance. Globalization and diversity continue to develop within organizations, and virtual teams have gained acceptance and relevance in the business community. Organizational leaders have embraced virtual teams, and the effect of these teams is strong.

Virtual teams exist in corporations throughout the business world. Virtual teams are attaining worldwide success, and knowledge transfer and sharing among virtual teams is critical. Effective communication leads to knowledge transfer and trust among virtual teams (Oshri, van Fenema, & Kotlarsky, 2008). Factors that are making these teams successful are becoming more widespread, and organizational leaders understand what it takes to have productive global teams. Higher quality relationships with the leader and increased communication with the leader are influential factors. Globalization and diversity exist in organizations and will continue to develop. Virtual teams will continue to gain acceptance and relevance globally. Organizational leaders will continue to embrace globally distributed teams, and these teams will have bigger effects.

Chapter 3 include a discussion of the study's research method and research design. This chapter will also include the study's research and data collection procedures. Additional topics include the sample selection process and the expected sample size.

Chapter 3: Research Method

The purpose of this phenomenological study was to explore and describe the lived experiences of effective virtual-team leaders regarding their attributes and the operational strategies they used to lead their virtual teams. The focus of this study was the characteristics of virtual-team leaders viewed from the perspective of their lived experiences. The general problem in this study was that the top management of many organizations lacks an understanding of the extent to which leaders should manage virtual teams differently from traditional face-to-face teams (Quisenberry & Burrell, 2012). The specific problem was that some organizational leaders do not have effective strategies that drive the success of global virtual-team leaders.

This chapter covers the following topics: a summary and a justification of the research design selected for this study and the rationale, the research questions, the central concepts of the study, the role of the researcher, the methodology, participant selection logic, sampling strategy, participation criteria, saturation, instrumentation, the pilot study, recruitment procedures, data collection and analysis, trustworthiness issues, and ethical procedures. The data came from semistructured interviews with a sample of 20 virtual-team leaders from various business organizations from across the United States. This chapter included details on data collection and data analysis, as well as the methods selected to collect, organize, and analyze the data.

Research Design and Rationale

Research Questions

The two questions were used to guide the research of global virtual-team leaders in this study:

RQ1: Based on lived experiences of virtual-team leaders, what are the differences in management strategies for virtual teams and traditional face-to-face teams?

RQ2: Based on lived experiences of virtual-team leaders, what are the best ways global virtual-team leaders can instill trust and improve communication among team members?

Central Concepts of the Study

Two conceptual theories formed the basis of this research study: transformational leadership and LMX. Transformational leadership and LMX leaders can positively affect the behavior, job attitude, and job satisfaction of employees (Burch & Guarana, 2014).

Transformational leadership is a leadership approach that causes change in individuals and social systems and creates valuable and positive change in subordinates (Braun et al., 2013). In transformational leadership, the goal is to develop followers into leaders. With LMX, the leader develops a relationship with subordinates (members), and the quality of the relationship can influence the subordinates' job performance, job satisfaction, and decision making (Goh & Wasko, 2012). Both concepts are crucial to the success of virtual-team leaders and the success of virtual teams, particularly when the leaders are effectively communicating with the employees and staff. The focus of both concepts was on the relationship between leaders and their staff. The focus of

transformational leadership was the leaders' ability to transform followers through a vision that encourages employee positive change, while the emphasis of LMX was the significance of the leader's relationship with the followers to drive positive behavior (Burch & Guarana, 2014). In both transformational leadership and LMX, the leaders support the followers in becoming more engaged and productive in their work.

Transformational leadership and LMX are successful strategies when there is positive communication and feedback between leaders and employees.

Research Design and Rationale

In research studies, researchers have the choice of three research methods: qualitative method, quantitative method, or mixed methods. A vital component in conducting a research study is determining which research method and design is most appropriate for the study (Patton, 2015). There are distinctive differences between qualitative and quantitative methods. A qualitative method is suitable when researchers conduct interviews or observations that will answer research questions (Qu & Dumay, 2011). Patton (2015) indicated that qualitative research involves interpreting interviews, observations, and document analysis to find meaningful themes and patterns. Researchers conduct quantitative research to quantify a problem by generating numerical data or data that they can transform into statistics. Simon and Goes (2018) stressed that a quantitative study is objective and is suitable for locating quantitative data using numbers. Yilmaz (2013) contended that in quantitative research, researchers tend to focus on providing surveys or other testing techniques to large groups of participants to solve a hypothesis. Quantitative research involves testing hypotheses by analyzing the relationship between

different variables measured with numbers and analyzed with statistics (Yilmaz, 2013). A mixed methods approach is a combination of the two main research methods, qualitative and quantitative, used either concurrently or sequentially to understand a phenomenon of interest (Venkatesh, Brown, & Bala, 2013). The qualitative method was suitable for conducting this study.

The qualitative research method was appropriate for exploring the lived experiences of virtual-team leaders. The exploration incorporated the characteristics and management strategies attributed to virtual-team leader success. The research design chosen for this study was the phenomenological design. The virtual-team leaders participated in semistructured telephone or electronic interviews. A quantitative study is objective and seeks to locate quantitative data using numbers (Simon & Goes, 2018). This study involved describing the subjective realities of virtual teams from virtual-team leaders' lived experiences. To have a better understanding of the phenomenon under study, a qualitative method was the best approach.

The word phenomenology alludes to the study of occurrences, in which a phenomenon is anything that appears to someone in their lived experiences (Gill, 2014). Patton (2015) contended that in a phenomenological approach, the researcher attempts to gain a better understanding of the significance of the participants' everyday experiences. The key findings derived from phenomenology are an understanding of a phenomenon as seen through the eyes of the participants who have experienced the phenomenon (Patton, 2015). Furthermore, with this design, participants had the opportunity to elaborate and go into detail in the responses.

The phenomenological design comprises several approaches that include constitutive phenomenology, descriptive phenomenology, empirical phenomenology, genetic phenomenology, hermeneutic phenomenology, interpretative phenomenology, and transcendental phenomenology (Chan, Fung, & Chien, 2013; Moustakas, 1994). Moustakas (1994) described transcendental phenomenology as a scientific study of the appearance of things, of phenomena as individuals see them, and of the lived experiences of the individuals. Gill (2014) identified two distinct kinds of transcendental phenomenology: Giorgi's descriptive phenomenology and Sanders's phenomenology. Giorgi (2009) described descriptive phenomenology as focusing on concrete descriptions of the lived experiences of the participants. Sanders's phenomenology is a research method used to explain the implicit meaning and structure of lived human experiences (Gill, 2014). The differences between these two phenomenological methods are small and depend on the discipline studied.

The phenomenological approach used to conduct this research was descriptive phenomenology. Descriptive phenomenology was suitable for describing the lived experiences of participants (Giorgi, 2009). The descriptive phenomenology method was applicable for this research study because of the capability of acquiring complete descriptions through analysis that would explain the essence of the lived experiences of the participants (Moustakas, 1994). I chose this research design to produce a deeper understanding of the traits and management plans attributed to the success of virtual-team leaders.

Other qualitative research designs considered included case study, ethnography, and grounded theory. Case study as a research design is for exploring the relationship between a single person or group and a phenomenon in depth and over a specific period (Houghton, Casey, Shaw, & Murphy, 2013). The central concept of ethnography is that any group of people interacting together for a certain period will develop a culture (Patton, 2015). The research for ethnography involved collecting data from a cultural group while observing how that group operates within a certain setting (Moustakas, 1994). Grounded theory is an inductive methodology that develops patterns in data (McCallin, Scott, & Johnston, 2009). In grounded theory, researchers can construct theory by analyzing data. Using a case study, ethnographic, or grounded theory approach will require face-to-face interviews and on-site data collection. Therefore, these research approaches were not resourceful or feasible. These forms of qualitative research are typically time consuming and can be expensive. The descriptive phenomenological approach was the most appropriate for this study.

Phenomenology has been a significant research design for centuries. The word phenomenology appeared in European philosophy as early as 1765 (Moustakas, 1994). Hegel developed a well-defined meaning of phenomenology referring to knowledge as it appears to consciousness and describing what an individual perceives, senses, and knows through experiences (Moustakas, 1994). Phenomenology involves conducting a close analysis of lived experiences to understand the creation of meaning through personal awareness (Starks & Brown-Trinidad, 2007). Phenomenology provides a detailed understanding of the lived experiences of individual participants. The aim of

phenomenology is to transform the lived experiences of people into a textual expression of the essence of a phenomenon (van Manen, 2007). Englander (2016) described phenomenology as a science that includes examining certain knowledge and clarifying that researchers ground all comprehension for human research. Researchers must understand when it is appropriate to employ phenomenological methodologies.

Phenomenology involved studying individuals who have experienced a specific type of phenomenon. In descriptive phenomenology, a researcher identifies a phenomenon to study, collects data from participants who have lived experience of the phenomenon, reflectively analyzes the data, and identifies general themes about the phenomenon (Giorgi, 2009). The goal of the researcher in descriptive phenomenology is to describe the phenomenon accurately and remain true to all the facts (Groenewald, 2004). Bentz and Shapiro (1998) noted that at its core, the intent of phenomenology is to enhance the understanding of the phenomenon through participants' words. Researchers describe the phenomenon as experienced by the participants. In this research, the phenomenon was virtual-team leadership, and the data came from 20 individuals who have led virtual teams from different business organizations across the United States. These virtual-team leaders participated in semistructured interviews to collect the data. The study included descriptions of the subjective realities of virtual teams from the virtual-team leader perspective.

Role of the Researcher

The researcher's role was to collect, organize, analyze, and interpret the data collected and the results. Data collection involved using semistructured interviews with

the participants. I conducted interviews with 20 virtual-team leaders as participants in this study. After receiving Institutional Review Board (IRB) approval, I searched for potential participants through professional networking and used snowball sampling to find 20 virtual-team leaders willing to participate. The participants were experienced virtual-team leaders who far exceeded the 2 years of virtual team leadership, with more than three team members. I sent an e-mail to the potential participants inviting them to participate in the study voluntarily. The participant recruitment letter appears in Appendix A. After receiving the responses from the potential participants indicating an interest in participating in this study, I sent each one a consent form. Upon receiving the signed consent forms, I conducted semistructured interviews using electronic media such as telephone calls.

The interviews consisted of asking open-ended questions to the virtual-team leaders to collect data to reflect the focus of the study. Englander (2012) noted that the interview is the primary data collection method closely associated with qualitative scientific research. To achieve high-quality precision and objectivity, data collection and data analysis must follow descriptive phenomenology to achieve accuracy (Englander, 2012; Giorgi, 2009). The quality of information collected during the interview process depends on the ability of the interviewer (Englander, 2012). In addition to the quality of the interview, the interviewer must keep the descriptive criteria in mind during the entire process (Giorgi, 2009). The confidence and experience of the researcher help determine the strength of the qualitative approach.

The strength of this qualitative approach was depended on preventing potential biases. Putting aside any preconceived ideas regarding the research will minimize any potential biases. In a qualitative phenomenological research approach, researchers attempt to separate all prejudgments regarding the phenomenon under study (Moustakas, 1994). This is the epoché process. Moustakas (1994) noted that with epoché, researchers attempt to eliminate speculations and increase knowledge about all potential doubt. Self-reflection and self-dialogue can reduce any biases and minimize any predetermined thoughts (Moustakas, 1994). Another concept that researchers use to reduce bias is bracketing. Bracketing involves researchers putting their beliefs and thoughts aside during the discovery process (Chan et al., 2013). The researcher places the focus of the research in brackets; thus, the whole research process is completely on the research topic and research questions (Moustakas, 1994). Epoché and bracketing were essential to reducing preconceived ideas and biases in this study.

The interviews took place through electronic media. I collected the data, organized the data, analyzed the data, interpreted the data, and reported the findings. After data collection was over, I loaded the responses into NVivo 11 software to categorize any common themes. After the data analysis, I presented the common themes. A data analysis review involved explaining the characteristics and management strategies credited to successful virtual-team leaders. This phenomenological study involved presenting data for future virtual-team leaders to increase the understanding of character traits and management strategies from the perspective of virtual-team leaders through their lived experiences. A possibility of potential bias existed in research if a relationship

existed between the researcher and the participants. The participants in this research were former or current organizational virtual-team leaders. There was no personal or professional relationship between the researcher and participants. I did not have any prior contact with any of the virtual-team leaders; therefore, I was able to reduce the potential for any biases between myself and the participants. Researchers must restrict all possible or potential biases, particularly when researchers serve as an instrument.

Methodology

The methodology section included information on the criteria for participant selection. In addition, this section included a description of the sampling strategy and the instrumentation selected for data collection and data analysis. The test procedures and procedures for recruitment were also topics in this section.

Participant Selection Logic

Participants selected by researchers for phenomenological research studies had lived the experiences of the phenomenon under study. When selecting participants, the initial task was to choose participants who have meaningful experiences of the phenomenon under study (Yüksel & Yıldırım, 2015). Previous research had shown that virtual teams encounter unique challenges, such as geographical separation and time zone differences (Aiken et al., 2013). Because of the unique challenges faced by virtual teams, especially when there are language differences, it has been difficult for virtual-team leaders to be effective; these teams tend to have more failures than successes (Serban et al., 2015). Organizational leaders who understand the character traits and management strategies of successful virtual-team leaders can provide information to choose the most

suitable roles for virtual-team leaders and members. The sample for this research study was virtual-team leaders who had at least 2 years of experience leading virtual teams with a minimum of three virtual team members. The team leaders came from various career fields and provided perspectives from different organizations.

Numerous sample sizes were suitable for research studies, depending on the type of study. Sample size determination was a critical element in research studies because it can ensure a researcher can present the results to the public with a significant level of confidence (Nachmias & Nachmias, 2008). In qualitative research studies, the sample size can depend on five things: (a) scope of the study, (b) nature of the study, (c) data quality, (d) study design, and (e) use of shadowed data (Starks & Brown-Trinidad, 2007). Patton (2015) mentioned that there are no rules for sample size in qualitative research; sample size depends on the purpose of the research. Other determinants of sample size in qualitative research are how much the participants know about the topic and how much the participants are willing to talk about their experiences (Morse, 2015). The participants' stories revealed what it takes to be effective virtual-team leaders.

In phenomenology studies, a small number of participants who have experienced the research phenomenon can provide the information required to uncover the essential components of the study (Gill, 2014). Researchers have used various sample sizes in phenomenological studies. Starks and Brown-Trinidad (2007) noted that a typical sample size is between one and 10, Groenewald (2004) suggested 10, Mason (2010) mentioned 20 and 30 were the most common sizes, and Dworkin (2012) mentioned five to 25 participants.

The sample size for this study was 20 participants or until data saturation occurs. The 20 participants provided enough information by presenting thorough accounts of their lived experiences. In addition, the sample size of 20 was consistent with the general sample size in phenomenological studies. Sample sizes should be sufficiently large for researchers to summarize the answered interview questions in depth. Common themes arose from the interviews with the 20 participants.

Sampling Strategy

Data came from participants with extensive knowledge in virtual-team leadership. Participant selection involved using the purposeful sampling procedure. A purposeful sampling strategy involves selecting participants purposively because they understand the phenomenon of the study (Patton, 2015). The goal of achieving significant data leads researchers to participants with suitable knowledge and experience regarding a specific phenomenon, which is purposive or purposeful sampling (Bagnasco, Ghirotto, & Sasso, 2014). The power of qualitative purposeful sampling was the importance of having an in-depth understanding of information-rich cases (Patton, 2015). Researchers can learn a lot about the issues that are most important to the purpose of the research.

The process of selecting participants involved the purposeful sampling technique. Yarmohammadian, Atighechian, Shams, and Haghshenas (2011) noted that the ideal method to select virtual-team leader participants is purposeful sampling techniques such as nonrandom purposeful sampling and chain sampling. The focus of purposive sampling was on conceptual validity (Miles, Huberman, & Saldana, 2014), which researchers can use to identify an example with certain characteristics of a population that will answer the

research questions. Purposeful sampling technique was applicable to this study, because I could capture a wide range of perspectives from the participants' views on virtual teams and how to lead virtual teams effectively.

Participation Criteria

The participants for this study were former or current virtual-team leaders. The participants came from various organizations, career fields, experience levels, and professional backgrounds. The leaders had at least 2 years or more of experience as a virtual-team leader with a minimum of three employees. Having three employees gives virtual-team leaders a diverse team with differences and similarities (Derven, 2016). The participants were supervisors in the Operational Management department. Twenty participants participated, which served as a suitable sample size for the study. Reviewing the potential participants' answers to the initial demographic questions revealed if they met the established criteria. The demographic questions appear in Appendix B. The participants responded to interviews conducted through electronic media. Semistructured, open-ended interview questions were suitable to determine the traits of successful virtual-team leaders.

The initial source of participants was LinkedIn. Other sources of participants were an online university's research participant portal, professional websites, and professional newsletters. The process involved sending an e-mail to potential participants to explain the research process, research topic, and expectations of the participants if they participate in the study. I communicated with participants through e-mail. Participants received an e-mail to explain the purpose of the consent form and inform them that their

personal and organizational information was confidential. The participants had a complete understanding of their role in the research study.

The study involved an attempt to identify the effective management strategies of virtual-team leaders. Leaders could use the strategies to manage and lead virtual teams. The goal of this study was to understand the character traits attributed to effective virtual-team leaders, in addition to the preferred management strategies used by the leaders to be successful. The findings may identify aspects regarding the leadership strategies of virtual-team leaders that could assist in managing virtual teams.

Saturation

With a sample size of 20 participants, I expected that by identifying common themes in character traits and leadership strategies, I would reach saturation. Saturation can occur when the collected data become redundant and participants provide no new data or information (Baker & Edwards, 2012). Therefore, a small sample of participants presenting rich descriptions of their lived experiences would lead to data saturation. When the data became repetitive, there was no need for additional research. I did not have to contact additional global virtual-team leaders to participate, because saturation did not occur with the original sample size. Saturation is significant when researchers attempt to confirm research credibility and transferability.

Instrumentation

The primary data collection instrument in this research study was interviews. The data came from 20 participants and was enough to address the purpose of this study. The questions used were semistructured, open-ended questions. Semistructured interviews

provided the best opportunity for researchers to collect information about the lived experiences of the participants (Wilton, Paez, & Scott, 2011). Semistructured interviews included prepared questions to pursue common themes from the participants and are the most common qualitative research method (Patton, 2015). Using open-ended questions afforded an opportunity for virtual-team leaders to provide their views on effective leadership characteristics and strategies of successful virtual-team leaders.

The interview questions were suitable for exploring the lived experience of virtual-team leaders and their leadership strategies. The semistructured interview process permitted the participants to answer the questions through in-depth responses that provided accurate information. Open-ended questions probe for in-depth responses about participants' perceptions, thoughts, and knowledge of the subject matter (Patton, 2015). Patton (2015) noted that with open-ended questions, the individuals interviewed can use their own words and take whatever direction necessary to express themselves. These responses to the questions support reactions that can direct participants instead of leading them (Englander, 2012). The open-ended questions and thorough responses in the interview process supported the personal interactions between the participants and me.

Another data collection instrument to be used was a demographic questionnaire. The questionnaire was sent in an earlier e-mail sent to the participants. The consent form was the initial e-mail sent to the participants. The demographic questionnaire had standard questions, such as gender, age, and ethnicity. Other questions included years leading virtual teams, experience as a virtual team member, number of teams led, and so

forth. The purpose of the demographic questionnaire was to provide basic information for the participants.

I developed an instrument appropriate for structured and semistructured interviews for this study. The structured closed-ended questions were part of the demographic questionnaire. The demographic questions revealed the background of the participants. The questions presented during the interviews were open-ended questions and will give the participants an opportunity to provide more data.

Pilot Study

A pilot study was necessary to aid in testing and refining instruments for a study. A pilot study is conducted to test and refine the interview questions and study methodology (Yin, 2011). Conducting the pilot study helped to establish credibility to ensure the interview questions cover the studied topic. Researchers conduct pilot studies to clear up any issues that arise with the design of the interview questions prior to the study. Additionally, testing the interview questions prior to the primary study helped validate the research questions.

For the pilot study, I asked two virtual-team leaders to review the interview questions, consent letter, participant's recruitment letter, and demographic questionnaire. The pilot study participants were not part of the sample for the study. The two selected pilot study participants were virtual-team leaders, with a minimum of 2 years' experience as virtual-team leaders. The virtual-team leaders evaluated the interview questions to determine the level of accuracy and appropriateness of the questions. A significant result of the pilot study was that it can uncover wording that is unclear, incorrect, or written in a

format that is hard to understand. I used telephone interviews as part of the interview process, therefore I conducted a pilot study for recording quality and ease of use. The pilot study of the interviews helped the interview process run smoothly during the actual research study.

Procedures for Recruitment, Participation, and Data Collection

Participant recruitment initially came from the social media website LinkedIn. The LinkedIn website is a business-oriented social networking site that connects professionals with other professionals. The participants for this research study were virtual-team leaders who had at least 2 years of experience leading virtual teams with a minimum of three virtual team members. The participants were supervisors in the Operational Management department. The team leaders provided perspectives from different organizations. Walden University had a participation pool where potential participants who met the criteria could respond to the study board and send an e-mail to a researcher if interested in participating in a study. Researchers can connect to participants who want to contribute to the research.

Prior to participating, the participants received information about the data collection approach, in addition to information indicating that participation had to be voluntary and kept confidential. Participants submitted their answers to the demographic questionnaire through electronic media (see Appendix B). They also received an informed consent form via e-mail. The information received in the demographic questionnaire will remain confidential. The participants felt comfortable giving honest and truthful responses to the questions. If any of the participants felt uncomfortable or did

not want to participate in the study, I just contacted the next participant. I informed any participants who left the study prior to interview completion that I would take care to maintain the confidentiality of any information they provided. By providing this information to the participants during the initial stages of the process, the participants were willing to share their information.

During the participants' interviews, I used telephone interviews as my primary means of collecting data. The responses by the participants, and all data related to this study, will remain stored on an external hard drive secured in a safe for 5 years. I am the only person with the safe combination.

Data Analysis Plan

There are various methods of analysis for research data. Moustakas (1994) developed two methods of data analysis for phenomenological purposes. One of those methods, the Van Kaam method, is a common method for analyzing data and will be suitable for this study. The study used the modified van Kaam method to code and organize the data from the interviews. Maxwell (2013) noted that coding should be helpful to researchers by coupling information with comparable information to make analysis easier. This study included open coding. Patton (2015) described open coding as discovering patterns, themes, and categories from the data in the initial stages. Selective coding involves conducting a deep level of analysis to interpret and synthesize the data (Patton, 2015). Findings emerge from the data analysis.

The responses to the interview questions included common themes and a better understanding of the perceptions and experiences of the participants. A modified Van

Kaam method can establish common themes and meanings among participants (Moustakas, 1994). The seven steps used in analyzing the transcribed interviews of each research participant are as follows (Moustakas, 1994): (a) listing all information relevant to the experience, (b) reducing and eliminating data to determine invariant elements, (c) grouping and thematizing the invariant elements, (d) checking the identification of themes, (e) constructing individual textual descriptions of the experience from transcribed interviews, (f) validating descriptions of each participant's interview experience, and (g) constructing a personal description of the essences of the experience. This seven-step process will lead to identifying common themes based on the analyzed data. The steps may lead to a better understanding of the participants' lives.

After data collection from the virtual-team leaders participating in this research study is complete, the next step was to analyze the data. Data analysis involves converting data into themes through a system of coding. Moustakas (1994) noted that during qualitative phenomenological research studies, researchers should organize data into themes. This phenomenological study involved conducting interviews and analyzing the data using Moustakas' modified van Kaam method. NVivo 11 was the software used to analyze and code the data. The modified van Kaam method is suitable for analyzing the transcribed interviews of research participants (Moustakas, 1994). Researchers are then able to organize the data and determine themes, which leads to the dependability and credibility of the data collected and analyzed.

Interpreting the data, identifying themes, and coding was part of the data analysis procedures in this study. Through open coding, I developed codes and themes from the

data, then examine the data to search for words and phrases that are related, to group the data into similar categories (Maxwell, 2013). I reviewed the data to compare the responses for similarities and differences. I planned to contrast and compare the responses from the interview questions, developed codes, and noted themes and patterns. Axial coding was used to allow reexamining of the categories identified during open coding and determine connections for any new data collected and analyzed (Simon & Goes, 2018).

Issues of Trustworthiness

The dependability and credibility of research instruments are a concern when conducting phenomenological research with interviews. Researchers need to demonstrate that they attempted to provide information that was accurate and correct. The four categories that can establish trustworthiness in a research study are credibility, transferability, dependability, and confirmability (Schwandt, 2015). The credibility of the research and the participants helps provide positive results. The study took place in an atmosphere where the participants feel comfortable being accurate and truthful on the subject matter.

Credibility

Credibility is an essential part of the data collection process in a qualitative study. Schwandt (2015) noted that credibility indicates that the information received from the participants during the research, and then analyzed, remains true to the information provided in the initial data collection. In a qualitative study, researchers must present the findings and results from the participants' perspectives clearly and accurately (Noble &

Smith, 2015). In addressing credibility, researchers attempt to present a true picture of the phenomenon under study (Shenton, 2004). Credibility is a significant factor when considering the background and qualifications of a researcher. Credibility of the research study occurred when the description of the lived experiences matched the nature of the phenomenon.

Transferability

Transferability is the external validity in a qualitative research study. Qualitative researchers need to be concerned with transferability and dependability when designing a study (Patton, 2015). Simon and Goes (2018) described transferability as the extent to which researchers can apply the findings in a study to individuals outside the study sample. Transferability allows researchers to transfer the findings of a study to a different environment and maintain the base of information of the completed study. Shenton (2004) noted that to ensure transferability, readers must be able to determine if the current environment is like another known situation and if they can apply the findings to the other environment. Each participant had a story, and the stories reflected the lived experiences of each virtual-team leader. The participants were supervisors in the Operational Management department. Therefore, the findings could be transferable to Operational Managers of different work environments.

Dependability

Dependability is the qualitative counterpart to reliability. The focus of dependability is on researchers' ability, and it is researchers' responsibility to ensure they conduct studies logically (Schwandt, 2015). Similar to credibility, researchers can

indicate dependability using triangulation. Qualitative research that is dependable should have an audit trail that shows the procedures included in the study. Therefore, the potential exists to repeat the study. An audit trail can ensure the quality of a study.

Confirmability

Confirmability is objectivity in a qualitative study. To achieve confirmability, researchers must take steps to demonstrate that findings occur based on the data and not their own predispositions (Shenton, 2004). Information in this research study came from the participants' answers provided in the demographic questionnaire and the semistructured interviews. There were no known research biases. The objective was to determine the traits and strategies attributed to virtual-team leader success.

Ethical Procedures

Prior to conducting research for the study, I submitted the IRB application form to obtain approval through the Walden University IRB to ensure the study meets the ethical requirements. Walden University researchers must receive permission from the IRB to conduct research. All participants received a consent form via e-mail before the research begins. The participants acknowledged consent to participate in the research by returning the consent form and thereby indicating they are willing participants. The participants indicated on the form that they consent to completing the demographic questionnaire and the semistructured interview. Information provided in the initial e-mail included the purpose of the study, data collection procedures, the nature of the participation, and the process to ensure confidentiality. To maintain confidentiality, the final study did not include participant names, organization names, or organization identifiers, and I secured

all information and devices used, such as hard drives, flash drives, audio recordings, and written information, in a safe. No one else had access to the information or access to the safe. Upon completion of the study, I will shred all paper and keep the computer data, hard drive, and flash drive in storage for a minimum of 5 years, after which I will wipe the hard drive and flash drive clean and destroy all the information.

Summary

Chapter 3 included a detailed discussion of the research method selected for the study. The purpose of this qualitative phenomenological study was to explore and describe the lived experiences of effective virtual-team leaders regarding the different character attributes and operational strategies used to lead these virtual teams. The participants were be successful virtual-team leaders from different businesses across the United States with global business operations. These leaders participated in semistructured interviews to collect data through exploring their lived experiences. The interviews took place via the telephone. NVivo software was suitable for organizing and analyzing the data collected.

Chapter 3 includes a discussion of the research design and the rationale for using the design, as well as my role as the researcher. Discussions also included participants (population, sampling strategy), instrumentation, data collection and analysis, trustworthiness, and ethical procedures. Chapter 4 includes the results, data collection and data analysis procedures, and evidence of trustworthiness.

Chapter 4: Results

The purpose of this qualitative phenomenological study was to explore and describe the lived experiences of effective virtual-team leaders and the operational strategies employed to lead virtual teams. The intent was to capture the lived experiences of virtual-team leaders to identify the traits and characteristics that make the virtual-team leaders successful. The general problem was that many organizational leaders do not understand that leaders must manage global virtual teams differently from traditional face-to-face teams. The specific problem was that some organizational leaders do not have effective strategies that drive the success of global virtual-team leaders. I developed two research questions that delved into the lived experiences of virtual-team leaders:

RQ1: Based on lived experiences of virtual-team leaders, what are the differences in management strategies for virtual teams and traditional face-to-face teams?

RQ2: Based on lived experiences of virtual-team leaders, what are the best ways global virtual-team leaders can instill trust and improve communication among team members?

These research questions were used to explore the phenomenon of the lived experiences of virtual-team leaders and the way these experiences contributed to the virtual-team leaders' success. This chapter includes a description of the pilot study, the pilot study results, a description of the setting for the interviews, the demographics of the participants, data collection, and data analysis procedures. In addition, I explain the trustworthiness of the research by discussing credibility, transferability, dependability, and confirmability.

Pilot Study

The phenomenological study required a pilot study prior to beginning the final research study. The pilot study was conducted to test and refine the interview questions and to confirm that the data collection approaches would be suitable for the larger scale research. The significant outcome of the research was an assessment of the research questions, the design of the interview questions, and the interview procedures used in the study. The main purpose of the pilot study was to have the participants provide feedback about the validity of the interview questions and their appropriate alignment with the research questions.

The participants of the pilot study were not part of the sample for the study; however, the pilot study participants met the same criteria required for the study participants. Two virtual-team leaders reviewed the research questions. I conducted an interview with the pilot study participants to test the validity of the interview questions. Both participants were virtual-team leaders from the operational management departments. The participants had over 5 years' experience as virtual-team leaders, leading multiple teams.

To select the pilot participants, I searched on LinkedIn for virtual-team leader groups, and then I posted the participant recruitment letter on those sites. The two pilot participants who met the criteria for my study received the consent letter and demographic questionnaire (see Appendix B). When I received the signed consent letter and completed questionnaire, I contacted the pilot participants and conducted the interviews. The pilot interviews took place via telephone.

The comments and feedback received from the two pilot study participants indicated that the interview questions aligned with the demographic questions and the nature of the study. The interview questions were therefore appropriate for the qualitative study. Both pilot participants indicated that it was not necessary to change the interview questions.

Setting

The research settings for the study consisted of telephone interviews. Two interviews took place electronically, as the participants were in other countries and due to the difficulties, we had coordinating a time. Each interview occurred separately and in private. The 18 telephone interviews took place in a soundproof media center room with the participants on speakerphone. All participants were aware they were on a speakerphone and knew the interviews were audio-recorded, as noted in the consent letter and interview protocol. The telephone interviews worked because they were convenient, and the geographic locations of the participants made it impractical to travel to their respective sites. The atmosphere of the interviews was relaxed, and the participants were comfortable in the setting.

Prior to each interview, I ensured that both recorders were on and working. I used the Livescribe Echo Smartpen as my primary recorder, with a digital audio recorder as my backup recorder. I checked both audio recorders before the interviews for sound quality and clarity. Due to the coordination involved in setting up interviews, the telephone interviews were conducive to the schedules of all participants. No known trauma could have influenced participants during the interviews or could have influenced

the interpretation of the research results. Furthermore, no budgetary constraints affected the results of the data analysis.

Demographics

This research study involved exploring the lived experiences of virtual-team leaders from the operational management departments of various industries. The participants were former or current virtual-team leaders with a minimum of 2 years of experience as a virtual-team leader who supervised at least three employees. Twenty qualified virtual-team leaders participated in the study. The participants were a diverse group of leaders from different industries and different locations who had different service experiences.

The participants lived in different parts of the United States, and two lived overseas. Some of the states where the participants resided were Alabama, Arizona, Florida, Georgia, Indiana, Maryland, Ohio, Oregon, and Virginia. Germany and England were the overseas locations for the two virtual team participants. The experience of the virtual-team leaders varied from 3 years to 20 years. Many of the leaders had more than 100 team members throughout their careers. The number of virtual team members at the time of the study ranged from three to 43. There were six women (30%) and 14 men (70%). The demographics of the participants are in Table 1. The terms used to refer to the participants were P01 through P20.

Table 1

Demographics of Virtual-team leader Participants

Participant	Gender	Experience (years)	No. of geographical	No. of team members	Industry
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			locations	(currently)	
P01	Male	10	4	8	Financial
P02	Male	20	30	10	Manufacturing
P03	Male	10	3	3-6	Marketing
P04	Male	6	6	10	Military
P05	Male	4	4	9	Chemical coating
P06	Male	3	9	20	Oil and gas
P07	Male	5	10	43	Government
P08	Male	18	45	50	Government
P09	Male	18	42	27	Life safety and security
P10	Male	10	8	25	Medical
P11	Male	15	7	14	Manufacturing
P12	Male	8	7	8	Military
P13	Female	5	4	8	Government
P14	Female	8	3	6	Retail
P15	Female	9	4	15	Marketing
P16	Male	6	8	12	Retail
P17	Female	4	3	7	Human resources
P18	Female	6	3	8	Marketing
P19	Male	8	5	12	Human resources
P20	Female	10	10	22	Human resources

Data Collection

Walden University's IRB approved my application to conduct research on January 16, 2018 (Approval No. 01-16-18-0479228). The participants for the study were 20 virtual-team leaders who were supervisors in operational management departments who represented 11 industries. The participants were experienced virtual-team leaders who far exceeded the 2 years of virtual team leadership, with more than three team members. My recruitment plan was to primarily use the social media site LinkedIn, along with using the Walden University Participant Pool. I posted my recruitment letter on numerous LinkedIn virtual-team leader LinkedIn websites and received positive feedback from participants within 5 days. The individuals who met the criteria contacted me via e-mail, and I subsequently sent the consent form and demographic questionnaire. After

receiving their signed consents, the participants and I coordinated on a day and time for the interview. The demographic questionnaire consisted of six questions that took 1–2 minutes to complete. The participants responded to nine open-ended interview questions.

Semistructured interviews were the primary means used to collect the data from the participants. The data collection process lasted 5 weeks. The two data collection instruments used were e-mail to send the consent form and demographic questionnaire and telephone interviews to collect the data. I planned to conduct all 20 interviews via the telephone; however, I made one change to the original plan for collecting data, which was to conduct two interviews electronically, because the participants lived overseas. It was difficult to coordinate a time that was conducive to the schedules of the overseas participants and my schedule. For Participants 12 and 13, I administered electronic interviews using e-mail (10%). Participants 1–11 and 14–20 (80%) participated in telephone interviews. The electronic interviews provided detailed answers to the questions, but the ability to hear the expressions and tones of the answers from those participants was not available.

The data collection method for this study was an interview protocol with interview questions. The interview protocol included the time of the interview, the date, the code number for the participant, and the interview questions. The participants answered nine open-ended interview questions. All participants provided complete responses to each interview question. Some participants provided succinct responses to the interview questions. Even the concise responses included valuable information that was beneficial to this research. In the last interview question, the participants had a

chance to provide any additional information to the study. This allowed the participants to add or reiterate any information deemed necessary, required, or important.

Recording the telephone interviews involved using two recording devices. The Livescribe Echo Smartpen was my primary recorder, and a digital audio recorder was my backup recorder. I checked both audio recorders before the interviews for sound quality and clarity. Using two recording devices allowed me to clearly capture the audio and transcribe the data from the interviews. The interviews averaged 17 minutes, with the longest interview lasting 26 minutes and the shortest interview lasting 8 minutes. The participants responded well to the interview questions and were willing to provide detailed answers to the questions.

Bracketing

As the researcher of this study, I made every effort to separate my experiences as a virtual-team leader from those of the participants. Researchers employ bracketing to set aside any predispositions of the phenomenon under study (Moustakas, 1994). It was imperative that I bracket the biases I may have had subconsciously regarding virtual teams. To prevent research bias from occurring in this phenomenological study, I employed bracketing during data collection and data analysis to put aside any previous knowledge, information, or thoughts on virtual-team leadership. While conducting, recording, and transcribing the participants' interviews, I separated my ideas and thought processes regarding virtual-team leaders.

Data Saturation

Data saturation is an important consideration in qualitative studies. When a researcher achieves data saturation, no new or relevant information has emerged (Given, 2008). A large sample size does not necessitate more information. Other than sample size, I considered other factors that may have influenced saturation such as selection criteria, heterogeneity of the population, time, and budget. Corresponding with data saturation in qualitative studies, I selected a sample size of 20 participants to conduct my data collection. No new ideas or relevant information emerged after the 20th interview, thus it was clear that I met data saturation.

Data Analysis

The purpose of this study was to explore and describe the lived experiences of effective virtual-team leaders and the operational strategies employed to lead these virtual teams. Using the phenomenological method, I gained an understanding into the lived experiences and thought processes of virtual-team leaders in operational management. The information gained during this process led to important thematic findings.

Coding must be fluid and include ability to eliminate, remove, and new codes as needed to answer the research questions and promote transferability throughout a study (Maxwell, 2013). Coding the data involved using Moustakas's (1994) modified Van Kaam method of data analysis, as defined in the Data Analysis Plan section in Chapter 3. Researchers can use a modified Van Kaam method to establish common themes and meanings among participants (Moustakas, 1994). The seven steps used to analyze the data included listing information relevant to the participant's experiences, determining the invariant elements, grouping the invariant elements, identifying themes, constructing

and validating individual descriptions from each participant's transcribed interviews, and developing a personal description of the essences of the experience. This seven-step process led to identifying common themes based on the analyzed data. Initially, I needed to identify the invariant constituents that related to the research questions. The responses to the interview questions included common themes and a better understanding of the perceptions and experiences of the participants.

This study involved using inductive and deductive analysis. Qualitative inductive analysis involves generating new results, concepts, or theories from specified data (Patton, 2015). Researchers use qualitative deductive analysis to determine the extent to which the data in a study support general concepts or results that already exist (Patton, 2015). The coding process for qualitative research is logical and intuitive, as the researcher uses inductive and deductive reasoning within three cyclical phases of coding (Simon & Goes, 2018). The three cyclical phases of coding are open coding, axial coding, and selective or substantive coding.

The first or initial phase of this coding process was open coding or first-pass line-by-line coding of the data. The first phase of coding involves developing descriptive themes and assigning category titles (Maxwell, 2013). For titling purposes, the open-coding phase included selecting specific words and phrases from the content. Axial coding was the second coding phase and involved discovering patterns and developing themes (Simon & Goes, 2018). During this phase, I began merging, clustering, and eliminating categories. Selective coding was the third phase in the coding process and is the coding phase with the deepest level of analysis (Maxwell, 2013). This phase consisted

of interpreting and synthesizing the meaning of the data. I compared the coded content and created new themes, as well as merged and removed categories. The coding in this study was a combination of all three phases.

Data analysis involved uploading 20 transcribed interviews into the NVivo 11 software for coding. The transcribed interviews comprised approximately 130 pages. The NVivo software allowed me to sort and organize the content into coded reports. The reports appeared alphabetically based on the titles of the interviews. I renamed the files to take advantage of the sorting feature available in the NVivo 11 software. The data were coded based on concepts and phrases collected from the responses of the participants. I developed numerous themes and patterns from the participants' answers to the nine interview questions. In total, I created nine parent nodes from the reports, with 119 subcategories.

This study included several coding methods based on the nature of the responses from a single interview having meaning in more than one category. I counted the interview document only once within a node. Multiple coding occurred within the subcategories of a parent node when the subcategory columns totaled more than 20 and 100%. Several participants provided a variety of responses to one question.

An example of multiple coding is displayed in Table 2 for the parent node "common leadership challenges." The participants provided comments about common leadership challenges more than once, as the 20 participants discussed their lived experiences in relation to the two research questions. The participants provided comprehensive responses to the interview questions. Multiple coding reports, with nine

primary nodes and 119 subcategories, included coded responses from 20 interview documents. I developed themes from the coded and analyzed interviews. To draw conclusions, I compared and consolidated the responses to formulate the findings.

Table 2

Results From Interview Question 1: Common Leadership Challenges

Parent node and coding	Documents	%
Q1. Common leadership challenges	20	100
Communication	15	75
Face-2-face connections	11	55
Team dynamics	7	35
Accountability	5	25
Organizational dynamics	4	20
Trust	4	20
Accessibility	2	10
Total	48	240

Note. $N = 20$.

The study did not include any discrepant cases. All the participants provided detailed responses to the interview questions during the interview process. No participants asked to remove an interview question or indicated that they did not want to answer a question. Researchers design phenomenological research to capture the lived experiences of each participant. The story of each participant was unique and inside the boundaries of the expected outcome.

Evidence of Trustworthiness

Credibility

Credibility indicates that the researcher has analyzed information received from the participants, and the information remains true to that provided during the initial data

collection phase (Schwandt, 2015). To establish credibility in the study, I used member checks. Member checking is a quality control process that researchers use to determine credibility, increase accuracy, and improve validity of the data (Harper & Cole, 2012). Member checks enable participants to verify the information provided was correctly stated and transcribed (Simon & Goes, 2013). The participants reviewed the data to validate the accuracy and credibility of the information. All participants agreed with the summary presented.

Transferability

Simon and Goes (2018) described transferability as the extent to which researchers can apply the findings in a study to individuals outside the study sample. Transferability allows researchers to transfer the findings of a study to a different environment and maintain the base of information of the completed study. Shenton (2004) noted that to ensure transferability, readers must be able to determine if the current environment is like another known situation and if they can apply the findings to the other environment. To ensure this study had a degree of transferability, I described data collection strategies and data analysis methods and provided a comprehensive description of the context of this research. In addition, I discussed biases, limitations, and assumptions. These factors are critical for evaluating feasibility for replication or transferability. The participants were supervisors in an operational management department of their industry, and the findings could be transferable to operational managers of different work environments.

Dependability

Dependability is another method to help ensure validity. Dependability accounts for variations and changes that occur during data collection (Given, 2008). Qualitative researchers must be cognizant of any potential changes that might require adding another coder to analyze the data. There were no significant changes within this study. I field tested the interview questions for content validity, the interview questions were easy to understand, and I followed a systematic process for conducting the interviews. NVivo was also useful in the audit trail, as it provided a record of the raw data, transcribed interviews, and codes or categories of data made during data collection and analysis.

The methods researchers use to validate research findings include conducting semistructured interviews and communicating with the participants using e-mails and telephone communication (Maxwell, 2013). The participants discussed their lived experiences as virtual-team leaders and the strategies they used to be successful. The data collected and analyzed led to identifying emerging themes. No changes occurred to the dependability strategy outlined in Chapter 3.

Confirmability

Confirmability captures the participants' lived experiences as opposed to a researcher's biases. Cope (2014) stated that researchers establish confirmability by validating that they develop findings only from the analyzed data. The two field tests conducted prior to data collection established the foundation for the data collection of this study. The field-test participants stated that the demographic, research, and interview questions aligned properly. The field testing ensured confirmability by validating that the

demographic, research, and interview questions captured the essence of the lived experiences of the virtual-team leaders.

Results

The participants provided rich details when responding to the interview questions, which related to the primary central phenomenon of the lived experiences of virtual-team leaders. The data collection process involved nine interview questions. Interview Questions 1–3, 5, and 6 related directly to the two research questions. Interview Questions 1–3 related to Research Question 1, and Interview Questions 5 and 6 related directly to Research Question 2. The interview questions were significant for answering the research questions. This section includes these five interview questions, with associated nodes and prevalent themes, participant responses to the themes, and a summary of the findings for the research questions.

Research Question 1

The first research question in this study was as follows: Based on the lived experiences of virtual-team leaders, what are the differences in management strategies for virtual teams and traditional face-to-face teams? Interview Questions 1–3 served as the foundation for answering this research question. The following section includes a discussion on the associated nodes and prevalent themes regarding the differences in management strategies for virtual teams and traditional face-to-face teams.

Interview Question 1 associated node and themes. Interview Question 1 was as follows: Based on your experiences, what are some common leadership challenges for

virtual-team leaders? The node associated with Interview Question 1 was common leadership challenges.

Node: Common leadership challenges. The two prevalent themes linked to the associated node of common leadership challenges were communication and face-to-face connections. The participants' primary responses to the associated node of common leadership challenges are in Table 3. The table also includes the primary themes and number of participants with similar shared thoughts related to these themes.

Table 3

Responses to Common Leadership Challenges Node

Prevalent themes	<i>n</i>	%
Communication	15	75
Face-to-face connections	11	55

Note. *N* = 20.

Theme: Communication. Fifteen of the 20 participants (75%) acknowledged that communication is a major challenge for virtual-team leaders. The responses about communication from the virtual-team leaders indicated the significance of communication between virtual-team leaders and team members. The participants mentioned the difficulties that communication can sometimes bring with virtual teams.

P04 stated,

The primary challenge is communication. You must be cognizant of the time differences and when the people will be available to communicate with you. Also, some things can get lost or confused with email communication, and even telephone communication. P01 acknowledged that "the most common challenge is communication, because you are doing it across a number of time zone differences." Based on these

responses, the participants understood that clearer communication with the team was paramount to the success of virtual teams.

P05 indicated,

The biggest challenge that is related to having a virtual team would definitely be effective communication. Over the phone or on conference calls, you can actually miss out on the subtleties of expression, facial expression and whether they're really absorbing the assignment or the discussion. And that becomes a big challenge.

The respondents specifically mentioned that communication was the major challenge faced by virtual-team leaders. A major concern was that information could become lost or be misinterpreted when given over the telephone or e-mail.

Theme: Face-to-face connections. Eleven of the 20 participants (55%) indicated that the lack of face-to-face connections is a challenge when leading virtual teams. The participants identified the importance of being able to collaborate with the team members in person and having quick access to the team members can be critical to the success of virtual teams. The participants felt that the lack of face-to-face connections can be troublesome for virtual teams. P20 said, "I'm a face-to-face guy, that is the biggest struggle. I think that most people have to come up with strategies on that." However, the virtual-team leader needs to have a strategy to combat the lack of face-to-face connections. Working as a virtual-team leader means having a reduced opportunity to observe the team members in a face-to-face environment. Team leaders must learn to monitor the work of their employees without direct visual supervision.

P03 stated,

My biggest problem is just staying in tune and in touch with the people that I'm supposed to be leading. And I'm an empowering person so I want them to lead as well and take control. But it is harder when you can't see them.

P08 mentioned,

When you're face-to-face, and somebody has an idea about what needs to be done, you can sit down and have that conversation with them and you can look at their non-verbal communication to see if they got it; or if they really don't have a clue about what you're talking about. A huge challenge with virtual teams is that it is harder to comprehend any non-verbal communication because of the different locations.

In a virtual team environment, communication does not develop as it would in a face-to-face workplace environment. The communication can become more difficult with limited or no face-to-face interaction between the virtual-team leader and team members. Due to decreased opportunities to monitor employees in a virtual team setting, face-to-face connections is a challenge.

Summary of node: Common leadership challenges. Based on the participants' responses to Interview Question 1 related to common leadership challenges, 15 of the 20 participants (75%), mentioned communication as a major challenge for virtual-team leaders. Eleven out of 20 participants (55%) mentioned a variance of communication, face-to-face connections, as a major challenge for virtual-team leaders.

Communication is critical to the success of virtual teams, and a primary reason is because of the different locations of the virtual team members. Different locations and different time zones add an additional degree of difficulty for the team leaders. Virtual-team leaders need to state their objectives and goals clearly and make sure the team members understand. Communication, in addition to face-to-face connections, allows virtual-team leaders to overcome common leadership challenges. The following section includes the leadership strategies to manage the challenges node and a discussion on the prevalent themes.

Interview Question 2 associated node and themes. Interview Question 2 was as follows: What leadership strategies are most effective in managing these leadership challenges? The associated node to Interview Question 2 was strategies to manage challenges.

Node: *Strategies to manage challenges.* The four prevalent themes linked to the associated node of strategies to manage challenges were open communication, goals and objectives, accountability, and face-to-face activities. Table 4 shows the participants' responses the associated node of strategies to manage challenges. The table includes the primary themes and the number of participants with similar shared thoughts related to the themes.

Table 4

Responses to Strategies to Manage Challenges Node

Prevalent themes	<i>n</i>	%
Open communication	16	80
Mission, goals, objectives	7	35
Accountability	5	25

Face-to-face activities	5	25
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Note. $N = 20$.

Theme: Open communication. Eleven participants acknowledged that open communication was the primary strategy to combat the major challenges of virtual-team leaders. The 11 responses represented 55% of the total participants. For example, P3 said, “Constant communication, letting them tell you how they feel. You must pretend they are in the office next to you. That takes a lot more effort.” P17 stated, “Constant communication, whether it’s a phone, text, or email; I make sure I stay in contact with my remote team members.” Virtual-team leaders must embrace all forms of technology that can improve communication with the team members. Open and constant communication can help protect against feelings of isolation among the team members.

P11 commented,

I think that one of the things you must do is establish a regular timeline of communication; whether that be with the individual or the overall group, so that they can feel like they are actively contributing and are productive. Everybody must feel that they are in it together. So that means, I must set up regular times for conversations, individually, as well as a group.

P14 mentioned,

I guess communicating to the individual and communicating your expectations. To be a leader of somebody who is remote, I must have a firm grasp that they understand the bigger expectations. And that there is no doubt that they are going to execute in line with what my expectations are that I have established. And then three, another leadership thing that needs to happen is that I am being clear; being

clear about what our responsibilities are, being clear about what we're trying to accomplish, being clear about the deliverable at the end of the period.

With open communication, the virtual-team leader keeps the employees informed, and the team members know what is required of them. When expectations are properly communicated, the virtual team members have a better understanding of their roles and responsibilities.

Theme: Mission, goals, objectives. Seven participants (35%) discussed organizational mission, goals, and objectives as a key strategy to manage the challenges of virtual teams. The virtual-team leader must clearly state the goals, objectives, and mission statement to the team members. As noted by P02, "The thing to manage challenges in virtual teams is to have clear and concise goals that are agreed upon ahead of time." The team leader must make sure all team members are working together toward the same organizational goals. P09 stated,

In a traditional environment there are several opportunities for touch points/encounters with the leader which don't require effort (side bar after a meeting, hallway discussion). In a virtual environment you must endeavor to create the condition set to allow for these informal touch points to occur. Thus, making yourself available to your team and allowing them to gain insight on your perspective, vision, and goals.

P08 provided direct comments when responding to the effective leadership strategy interview question:

Clearly articulating your goals and objectives, as well as clearly documenting your goals and objectives can help manage virtual team challenges. I'll give you an example. When I was a group commander, I had a chart and the chart listed the goals of the organization, with the mission and vision being on the top. That way, when everybody looked at that chart, regardless if I was around or not, they could then see, "here's the mission, here's what we're supposed to be doing." Also, they know what areas they should be working in, to meet the overall objective. So, I think from a virtual team perspective, you must have visual aids that people can then look at and reference periodically.

P10 mentioned,

There are a lot of challenges, but the main one that I can speak on through my experience is ensuring that the subordinate has the right vision and the right focus as far as whatever task they are doing in a remote location.

Clear communication of goals and objectives is essential to the success of virtual teams. In high performance virtual teams, members support each other in achieving goals and executing objectives.

Theme: Accountability. Five participants (25%) mentioned that accountability is a viable strategy to manage virtual-team leader challenges. Accountability as a strategy against virtual-team leadership challenges was succinctly confirmed by P04: "We have to make sure there is a level of accountability in everybody that's involved in the team." The team leader must make sure that all team members are responsible for their actions. Virtual-team leaders are responsible for each team member knowing their roles and

responsibilities. All team members need to have a level of accountability for the virtual team to be a success.

P06 stated,

One needs to have a good grasp as to their role and have a good finger on the pulse of the organization. By that, what I'm referring to is their skill sets, and the level of responsibility that these individuals have. And making sure everyone is aware where they are from the growth perspective.

Team members must be accountable and take responsibility for their actions and any deliverables. The increases in roles and responsibility clarity can enhance the level of accountability of team members. P04 indicated, "Ensure the subordinates have the right vision, the right focus as far as whatever task they are doing. In addition, the subordinates need to be accountable for all of their actions." P12 provided a specific response regarding accountability: "The team members must know what their responsibilities are, what needs to be accomplished, and be accountable for those responsibilities." Members of high performance virtual teams know their responsibilities and what is expected from them. The virtual-team leaders clearly define the roles and responsibilities of the team members

Theme: Face-to-face activities. Five participants responded that face-to-face meetings and activities could be beneficial strategies to manage virtual team challenges. Those five respondents represented 25% of the participants. The virtual-team leaders must demonstrate to the team members that their jobs and assignments are critical to the success of the overall team vision and objectives. P07 mentioned, "As the remote team

leader, you need to make continual trips to members, so that they know that important piece of their job is noticed by management and that you do care about their specific business.” Face-to-face activities give the virtual-team leaders the opportunity to use their interpersonal skills with the team members. Additionally, with face-to-face activities, the team leader can also respond to the non-verbal communication from the team members.

P10 stated,

The key challenge to that is it’s all about frequency of communication. One of the biggest gaps that I’ve seen from those who manage remote teams to those who don’t, is the fact you’re not face-to-face down the hall. So, that’s a huge challenge; that intimacy of communication. I’m a face-to-face guy, and that is the biggest struggle, I think that most people must face; getting more face-to-face activities with the team members.

P02 acknowledged,

I was fortunate enough to be in a situation where I had people working for me in nine different facilities around the country. I was able to get out a regular schedule, at least once or twice a year. In those in-person meetings I tried to make them as in depth and personal, getting to know people during lunches, dinners, meetings after work, etc. So, during big stretches of not being there with them, they felt that they still had a connection point.

When the virtual-team leader conducts face-to-face activities with the team members, they feel a sense of connection with the leader. Establishing face-to-face activities is a beneficial strategy to managing the leadership challenges of virtual-team leaders. In face-

to-face meetings, the team leader will have visual indicators whether the guidance is being received or has been misinterpreted. Being on-site, the leaders can see how things are progressing and can adjust guidance. In addition, the feedback loop between leader and team, which is critical to effective communication, is easier to maintain in a face-to-face environment.

Summary of node: Strategies to manage challenges. The participants were direct in their assessments of open communication being a leadership strategy that can be effective in managing virtual team challenges. Some participants believed that establishing a timeline of communication with the team members is beneficial when managing virtual teams. Communicating with the team members via telephone, e-mail, text, or in person, to maintain an open line of communication is essential for successful virtual teams. The face-to-face activities and meetings directly relate to open communication with the team members. Making sure virtual-team leaders clearly articulate the mission, goals, and objectives to their virtual team members is a significant strategy for managing virtual team challenges. The following section includes a comparison of virtual-team leader strategies and face-to-face leader strategies, as well as a discussion of the prevalent themes.

Interview Question 3 associated node and themes. The focus of Interview Question 3 was on directly comparing virtual-team leader strategy versus face-to-face team leader strategy. Interview Question 3 was as follows: From your experiences, what are your perceptions of the differences between management strategies of virtual-team

leaders and traditional face-to-face leaders? The associated node to Interview Question 3 was strategies to manage challenges.

Node: Compare virtual-team leader and face-to-face leader strategies. The four themes linked to the compare virtual-team leader and face-to-face leader strategies node were means of communication, clarity of communication, team roles and responsibilities, and visibility and accessibility. The participants' responses to the associated node of comparing virtual-team leader and face-to-face leader strategies are in Table 5. The table also includes the primary themes and the number of participants with similar shared thoughts related to these themes.

Table 5

Responses to Compare Virtual-team leader and Face-to-Face Leader Strategies

Prevalent themes	<i>n</i>	%
Means of communication	17	85
Clarity of communication	11	55
Team roles and responsibilities	9	45
Visibility and accessibility	7	35

Note. *N* = 20.

Theme: Means of communication. Communication is a primary theme between the virtual-team leader and team members. Seventeen respondents discussed the difference between management strategies of virtual-team leaders and face-to-face leaders regarding means of communication in response to Interview Question 3. The 17 respondents represented 85% of the participants and noted the means of communication as a difference in the management strategies of the leaders. P20 stated, "You have to actively engage the virtual team members, whether it is scheduling weekly or daily calls,

something that ensures the contact is continuous.” When the team leader has the ability to communicate directly with team members, the information is processed easier from the team members; point of view. The team leader can clearly outline the team goals and objectives and have immediate responses from the team members.

P01 stated,

If there are questions on day-to-day projects, it’s easier to walk down to someone’s office and ask a question; for virtual teams, you have email, cell phones, and instant messages, but messages can get lost in translation, and the messages do not have the depth as face-to-face conversations.

P16 added,

You need to be accessible and have a communication strategy with your own people, no matter where they are in the world; it’s absolutely vital. Whereas, if you are in the building, you can practice management by walking around and talking to your team members.

P05 indicated,

If you’re in the office and your team is in the office, it’s easy to have that communication. You know, they can come in, I always have an open-door policy. But, when you have remote teams, you’ve got to make sure that you’re available for those teams. What I like to do is, you will use a very simple rule that if it’s something that is immediate, text me. If it’s something that could require a little bit of time; just send me an e-mail. So, we use those as kind of an effective strategy with the remote teams.

The team leader must establish a plan with the virtual teams for utilizing the various means of communication. The leaders must create a plan for when the team members can phone, email, text, or conference call. In addition, this plan must be clearly articulated to the team members.

Theme: Clarity of communication. This theme continued the idea of communication being a critical element in virtual teams. Eleven participants out of 20 (55%) indicated that clarity of communication is a difference between the management strategies of virtual team members and traditional face-to-face leaders. P01 stated, “The difference between the management strategies of virtual leaders and face-to-face leaders is the ability to clearly and concisely outline the goals in face-to-face meetings.” P11 acknowledged,

Communication will always be perceived as a difference between the two leaders. With virtual teams, you are not physically interacting with your team daily or even weekly. Therefore, you must make sure your ideas, thoughts, and objectives are clearly stated.

P03 stated, “I think then you bring those skills of constant contact, you know, that making sure you’re checking back all the time to make sure everything was clear because, again, you don’t see the faces.” P09 confirmed,

Your direction needs to be clear and executable when sent out. If an email is interpreted wrong and execution is not as desired, you might not receive that feedback or become aware until it is too late.

P12 had a different idea on this question. P12 expressed,

Management strategies really don't change. Effective communication, building trust among subordinates, and empowerment all remain the same. But the way you go about delivering these aspects of effective management change. While in person, this could be done through frequent meetings, walking the office, and social functions. The opportunities to engage with a virtual team are usually less frequent and certainly less intense. This means that each engagement needs to be carefully managed to ensure maximum impact.

Clarity of communication is essential to the success of virtual-team leaders. Clear, concise, and consistent communication helps team members understand what is required. The team members know their roles and responsibilities. In addition, team members also understand how their work is in alignment with the overall strategy of the team.

Theme: Team roles and responsibilities. Knowing and understanding the roles and responsibilities of each team member is an important aspect of virtual teams. When the team members know their roles and responsibilities, they have a better understanding of what needs doing in the organization. Nine participants, 45% of the 20 participants, stated that team roles and responsibilities are a significant part of virtual team success. As mentioned by P09, "As a virtual leader, you need to think more strategically as your organization is not as reactive. Coordinating 38 geographically separated units on short notice is more difficult than coordinating collocated units." P07 stated,

Traditionally when a manager is sitting in front of his direct team, the thought is I got a better feeling of what this person's doing on a day-to-day basis. I see him

frequently. And they probably talk more frequently. The virtual team member who is more remote does not get much face time.

P04 mentioned,

The biggest perception, and the one that I feel is most significant, is the idea that your subordinate believes “out of sight, out of mind” and you got to break that dynamic. Out of sight doesn’t necessarily mean out of mind. And so, for me to be effective in that environment, I must make that apparent; making them understand that the old adage of “being out of sight,” is not equal to being out of mind.

P18 stated,

When defining roles on the team, the team leader must make a conscious effort to make sure the virtual team members are clear on their roles and responsibilities. Along with making sure that roles are understood, the virtual team members need to know how they fit into the goals and objectives of the team.

Successful virtual teams have clearly defined team roles and responsibilities. Team leaders should have the ability to effectively communicate team goals, roles, and responsibilities. It is vital that team member individual roles are clear. Clear roles heighten the capability of the team leader to follow through and hold people accountable.

Theme: Visibility and accessibility. Being accessible, and visible when appropriate, is a key attribute for virtual teams. Accessibility and visibility demonstrate one of the primary differences in the management strategies of virtual teams and face-to-face teams. Seven out of 20 participants (35%) cited visibility as a difference in the management strategies of these two teams. P05 stated, “When communicating with your

teams, you have to be more accessible and have much more due diligence with a remote team.” Team leaders who are available for the team members are beneficial to improving communication. Being visible and accessible for the team members, when the team needs clarification on the goals and objectives, is crucial for virtual team communication.

P06 indicated,

I think with virtual team members, one must make an extra effort from a communications standpoint. You must actively seek to ensure you’re engaged with them, whether it is scheduling weekly or daily calls, something that ensures that contact is continuous. And, and in addition to having people virtual, I think it’s critical, every so often to have a personal interaction with them as well.

P10 expressed,

You need to be accessible and have a communication strategy with your own people, no matter where they are in the world. It’s absolutely vital, and if you are in the building, you can practice management by walking around.”

P16 stated,

You’ll physically be in Des Moines once a year with your virtual team there, to ride with them. But, how do you attack that challenge of virtual teams; that makes it more difficult in my opinion. Also, it’s very rewarding when it works.

P12 had a different thought on this process:

Management strategies really don’t change. Effective communication, building trust among subordinates and empowerment all remain the same. But the way you go about delivering these aspects of effective management change. While in

person, this could be done through frequent meetings, walking the office and social functions. The opportunities to engage with a virtual team are usually less frequent and certainly less intense. This means that each engagement needs to be carefully managed to ensure maximum impact.

Virtual-team leaders need to be accessible to the virtual team members. The team leader needs to have a communication strategy with the team members in various time zones. A detailed communication strategy enhances the visibility and accessibility of the team leader to the team members.

Summary of node: Compare virtual-team leader and face-to-face leader strategies. Most of the responses from the participants indicated that there are differences in the management strategies of virtual teams and face-to-face teams. Based on the responses, the participants perceived communication as the most critical difference between virtual teams and face-to-face teams. Seventeen of 20 participants responded that the means of communication are a difference between virtual teams and face-to-face teams. In addition, 11 participants cited clarity of communication as a difference between the teams. The responses revealed that it is imperative that the team members know and understand their roles and responsibilities. Traditional or face-to-face team members can visit the offices of the team leaders to get clarification regarding their roles. Virtual team members usually must receive a clear explanation of their responsibilities from the team leader electronically, via text, email, or telephone call. In addition, team leaders need to have continuous contact with the virtual team members to make sure the team members

remain engaged and involved in the process. This leads directly into the team leaders being accessible to the virtual team members.

Research Question 2

The second research question was as follows: Based on the lived experiences of virtual-team leaders, what are the best ways global virtual-team leaders can instill trust and improve communication among team members? The responses to Interview Questions 5 and 6 directly answered this research question. A discussion on the associated nodes and prevalent themes concerned with improving communication and instilling trust among virtual team members follows.

Interview Question 5 associated node and themes. Interview Question 5 was as follows: Based on your experiences, what are the best strategies virtual-team leaders can use to improve communication among virtual team members? The node connected to Interview Question 5 was strategies to improve communication.

Node: *Strategies to improve communication.* There were four prevalent themes associated with strategies to improve communication with virtual teams. The four themes were open and scheduled communication, guide and direct the team members, multimodal communication, and build rapport with the team members. The participants' responses to the associated node of strategies to improve communication are in Table 6.

Table 6

Responses to Strategies to Improve Communication

Prevalent themes	<i>n</i>	%
Open and scheduled communication	14	70
Guide and direct	13	65
Multi-modal communication	13	65

Build rapport and connect	11	55
No. of participants	20	100

Note. $N = 20$.

Theme: Open and scheduled communication. Open and scheduled communication with the team members is a high priority for virtual-team leaders. As shown in Table 6, 14 out of 20 participants (70%) believed that open and scheduled communication can improve the overall communication of virtual teams. P19's response directly related to this theme. P19 stated, "One of the primary strategies to improve communication with virtual teams is frequent scheduled and structured communication." Having scheduled times to talk with the virtual team members can keep them focused on the assigned missions and responsibilities. P14 commented,

Whether it's computer, telephone, or virtual, in the sense of VTC [video-teleconferencing], you must understand what the best way is to communicate with the team members. They also must know when you, as leader, are available for them to contact you.

P04 mentioned,

You need to know that person is going to be available and let them know when you're going to be available so, if there's a need to get in touch with me or, or get in touch with the subordinates, I know there are key touch points during the day that I can reach out to them and I know they're going to be where they say they're going to be.

P15 discussed scheduled meetings:

In our business we have what's called market meetings. We get together once a month, and this creates a cadence. We talk about and review projects. You drive the culture of team communication and team collaboration so that it's not just once a month that they're talking, but when they leave that meeting, they're out talking to the other team members. The other complement to that is, quarterly we would have the entire sales team meet. These quarterly meetings make sure the virtual team members talk to people who have the same role. It is good to see what people with the same role are doing in other locations.

P20 stated,

My direct reports [lead team members] get together once a quarter. It's scheduled two or three months out, so they know exactly the schedule. Everything in the meeting is structured, not scripted, and everybody leads at least one part of the meeting.

The participants also discussed the importance of open communication improving virtual team communication. To improve communication, the team leader needs to be accountable for precise and accurate communication that also allows for feedback from the team members. The scheduled communication gives the team members the opportunity to directly discuss issues they deem important.

Theme: Guide and direct. The participants emphasized that virtual-team leaders can improve communication by guiding and directing the team members. Thirteen of the 20 participants (65%) indicated a strategy to improve communication was to guide and direct. P03 stated, "To keep people interested, I give them a challenge. Let them know it

is okay to fail, just keep coming up with ideas.” Leaders must motivate and encourage virtual team members to keep them thoroughly engaged. P08 responded, “The leader how to understand and effectively utilize the team members and keep them focused toward the primary goals and objectives.”

P01 noted,

I think one way you could improve communication is by word and deed. So, in my case, I encourage on our team telephone calls when we’re talking about what’s happening within our organization. I guide them directionally and let them know what is expected.

The participants placed the impetus on virtual-team leaders to improve communication by guiding and directing the team members. Providing more guidance to team members on what is expected from them will keep the virtual team members involved and engaged. The members will continue to feel part of the team and to feel that their thoughts and ideas matter.

Theme: Multimodal communication. In a virtual team situation, multimodal communication between the team leader and team members is critical to team success. The team leader must communicate with team members using various forms of communication. Thirteen of the 20 participants (65%) mentioned multimodal communication as a strategy to improve communication. P08 noted, “This is an area that we’re growing, at least from the military standpoint. You have to use everything, including email, cell phones, text message, VTCs, [and] collaborative tools like Drop Box to communicate with the remote teams.” Other participants made similar comments.

P13 commented,

Chat rooms can be more effective than a sit-down meeting. People are expressing their thoughts, their ideas collaboratively throughout the day. It's then a matter from a leader's standpoint where you got to know how to pull out the good nuggets from the chat room remarks.

P20 emphasized the importance of the leader in improving communication with multimodal communication: "All collaborative tools are good, it's on the leader to understand how to effectively utilize them and keep the team focused toward the primary goals and objectives." P10 responded, "It's all about communications, and the burden is on the leader. The leader has to be organized and know what is the best means to communicate with each team member." P11 accentuated the role of the leader in multimodal communication of virtual teams: "The communication has to be clearly written and verbal to the members, due to the different ways of communication (email, Skype, teleconferences, FaceTime, etc)."

Virtual-team leaders must use multimodal communication when working with their virtual team members. The various means of communication include e-mail, text, Skype, FaceTime, teleconferences, and phone calls. The leader must understand which means of communication work best for each team member. Virtual-team leaders need to demonstrate organizational skills and personal skills to bring out the best in their team members.

Theme: Build rapport and connect. Building rapport with the team members, from the virtual-team leaders' perspective, is a strategy to improve communication.

Eleven participants viewed this as a viable way to improve communication with team members. The 11 participants represented 55% of the 20 interviewed participants. P02 stated, “You try to share a connection point or anything that you may have in common beyond the work issues.” P16 responded, “Bringing in team members onsite every so often for a face-to-face session, so you can build the rapport. I think this is critical for long term success with those individuals who are out in the field.”

P06 commented,

Part of it is making sure you develop that relationship and if one does that as a manager who is responsible for a remote team, it is critical that you develop a relationship with the individual both from a personal and work standpoint.

P09 stated,

You must figure out how to connect with your team in a virtual environment.

There are standard forums that you will use but you need to know who needs a phone call, who is happy with an email or who you need to visit. Building that understanding will help remove some of the obstacles to communication.

It is important that virtual-team leaders take time to connect with the team members. The communication can be work oriented or social. The team leader can check in with the team members or provide updates to the members on organizational functions. This builds rapport with the team members and ensures that members feel connected to the organization.

Summary of node: Strategies to improve communication. There were 16 different themes associated with strategies to improve communication between virtual-

team leaders and team members. This is an indication that various views of strategies can improve virtual team communication. The most prevalent themes were open and scheduled communication, guidance and direction from the leader, multimodal communication, and building rapport with the team members. Fourteen participants cited open and scheduled communication as a means of improving communication. Multimodal communication continued the overall communication strategy of improving communication with the virtual teams and had responses from 13 participants. Guidance and direction from virtual-team leaders also had 13 participant responses. Building rapport received 11 responses. The four prevalent themes placed an emphasis on the virtual-team leader leading the improved communication among virtual team members.

Interview Question 6 associated node and themes. Interview Question 6 was as follows: Based on your experiences, what strategies can virtual-team leaders use to instill trust among virtual team members? The node associated with Interview Question 6 was strategies to instill trust.

Node: *Strategies to instill trust.* Thirteen total themes related to strategies to instill trust. The two prevalent themes were promoting growth and providing a nonthreatening environment. The responses from the participants to the associated node of strategies to instill trust appear in Table 7. The table includes the primary themes and the number of participants with similar shared thoughts related to these themes.

Table 7

Responses to Strategies to Instill Trust

Prevalent themes	<i>n</i>	%
Promoting growth	13	65

Nonthreatening environment	9	45
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Note. N = 20.

Theme: Promoting growth. Promoting growth for the team members, including giving them more autonomy, providing them more opportunities, or developing more of their ideas, can instill trust among the team members. Thirteen participants mentioned promoting growth as a strategy to instill trust. The 13 participants signified 65% of the 20 participants in this study. P03 stated, “If the team members ideas are good, I can help them put those ideas into shape and sell those ideas. Letting them know they’ve been heard.” P04 stated, “Another area, in terms of developing trust, is to give them the opportunity to perform and do what they do best, every day. If you can do that, you can develop trust in those team members.” When team leaders provide autonomy to the team members and allow them to develop their ideas, more trust is produced. The autonomy given to the team members forms a relaxed environment, and the members provide a better performance.

P08 responded,

The biggest thing that I’ve found is allow people a platform to at least voice their opinions. They want to know and understand that they’re going to be heard, so that their work and effort isn’t for naught. Now that doesn’t mean that you must accept every idea that’s brought up. But it’s giving people the opportunity to be heard.

P19 indicated,

You must let the team know that it is okay to make a mistake. You don’t see them every day, so that is where the trust aspect comes in. You must help your virtual

teams understand that, “hey, you are going to make mistakes, but let’s move forward and learn from it.” You now are using your interpersonal skill-set.

P20 said,

If I instill in them the trust, then they know that they can bring me something that may just be a crazy idea, but I’m going to at least listen to it. And, it may get implemented. Being personable and honest with your team will frame their perception and transparency, and consistency will reinforce that perception.

Theme: Nonthreatening environment. The participants recognized that providing a nonthreatening environment is beneficial to instilling trust among virtual team members. Nine of 20 participants (45%) mentioned the importance of a nonthreatening environment when instilling trust among team members. P02 declared, “To instill trust, you have to make sure they understand that there is no threat.” P12 stated, “The team members can grumble about the boss; letting them do that and not feeling threatened by doing it, I think that establishes trust between the members.”

P04 revealed,

Some folks get intimidated by rank and you got to create an environment that allows these people not to look at the rank more, so that they look at the idea and understand that we are trying to get something accomplished. And so, that’s the biggest obstacle.

P07 noted,

With your virtual teams, now more than ever, you [have] got to be able to crunch information. And do analytical rigor and come out with a game plan and just

move out and stuff. But if they're scared they're going to make a mistake, then that hampers your ability when, as a leader, you have virtual teams.

P11 stated,

Having open and honest communication with the team members can instill trust.

There needs to be a free flow of information between the leader and team members. The virtual-team leaders need to listen to the team members and be receptive of their ideas and input. By being open and honest, the team members know that they can bring ideas to the table, and the ideas will be listened to. By listening to the team member ideas, this creates a non-threatening environment.

Summary of node: Strategies to instill trust. There were 13 themes associated with strategies to instill trust among virtual-team leaders and team members. The most common themes were promoting growth for the team members and providing a nonthreatening environment for the team members. Thirteen participants stated that promoting growth is a strategy to instill trust, and nine participants mentioned that providing a nonthreatening environment can instill trust.

Summary of Research Findings

In this study, the character traits and management strategies of effective virtual-team leaders. Effective virtual-team leaders have strong communication skills, clearly defined objectives, clear descriptions of how decisions are made, and clear descriptions of team member roles and responsibilities. This phenomenological study included two research questions: (a) based on lived experiences of virtual-team leaders, what are the differences in management strategies for virtual teams and traditional face-to-face teams,

and (b) based on lived experiences of virtual-team leaders, what are the best ways global virtual-team leaders can instill trust and improve communication among team members. The data revealed nine parent nodes and 119 subcategories. The research findings revealed five nodes and 16 prevalent themes that were critical for answering the two research questions.

Regarding Research Question 1, the participants disclosed their lived experiences regarding the differences in management strategies for virtual teams versus face-to-face teams. The findings from Interview Questions 1, 2, and 3, and the 10 themes identified were appropriate for answering Research Question 1. Communication is vital for the success of virtual teams, and a main reason is the different locations of virtual team members. Virtual-team leaders need to state their objectives clearly and ensure the team members understand the objectives.

Eleven of the participants (55%) mentioned open communication as the primary leadership strategy for managing the challenges of virtual-team leaders. Communicating with team members via telephone, e-mail, text, or in person, and maintaining an open line of communication are essential to being a successful virtual team. Face-to-face activities and meetings directly relate to open communication with team members. The virtual-team leaders need to articulate the goals and objectives to the virtual team members clearly. This strategy can help to overcome or manage the challenges to virtual teams.

The participants indicated that there are differences between the management strategies of virtual teams and face-to-face teams. Again, communication emerged as the most critical characteristic between virtual teams and face-to-face teams. Means of

communication and clarity of communication are two differences between virtual teams and face-to-face teams. In addition, it is essential that team members know and understand their roles and responsibilities. Traditional or face-to-face team members can visit the offices of the team leaders to get clarification of their roles. Virtual team members also need to receive a clear explanation of their responsibilities from the team leader. In addition, the team leader needs to have continuous contact with the virtual team members to make sure the team members remain engaged and involved in the process.

Regarding Research Question 2, the participants discussed through their lived experiences the best ways to instill trust and improve communication between the team leader and team members. The findings from Interview Questions 5 and 6 and the six themes identified were appropriate for answering Research Question 2. As with Research Question 1, the significant themes for Research Question 2 related to some form of communication. The most prevalent themes, open and scheduled communication, guidance and direction from the leader, multimodal communication, and building rapport with the team members, all related to communication. Multimodal communication referred to the overall communication strategy of improving communication with virtual teams. The themes emphasized the importance of virtual-team leaders trying to improve communication among virtual team members.

The most common themes to instill trust between virtual-team leaders and virtual team members were promoting growth for the team members and providing a nonthreatening environment for the team members. Virtual-team leaders must create an environment that is conducive for promoting the growth of team members, along with

providing a nonthreatening environment. The two themes can also open communication and make virtual team members feel that they are a large part of the team.

Summary

Chapter 4 included a detailed analysis of the data. This chapter also included the pilot study setting, demographics, data collection and analysis, evidence of trustworthiness of the research, and study results. The chapter included a description of the themes discovered during the data analysis process. The data collected from the participants were suitable for providing answers to the two research questions. The participants provided detailed answers to the interview questions that contained information on their lived experiences. The 20 virtual-team leaders provided professional perspectives into their lived experiences regarding virtual teams. The primary nodes that emerged were common leadership strategies, strategies to manage challenges, a comparison of virtual-team leaders and face-to-face leaders, strategies to improve communication, and strategies to instill trust. Chapter 5 includes an interpretation of the findings, limitations of the study, recommendations, implications, and the conclusion.

Chapter 5: Discussion, Conclusion, and Recommendations

The purpose of this phenomenological study was to explore and describe the lived experiences of effective virtual-team leaders and the operational strategies employed to lead these virtual teams. Phenomenology seeks to develop a greater understanding of the everyday lived experiences of participants. The important finding that derives from phenomenology is an understanding of a phenomenon seen through the eyes of those who have experienced it (Patton, 2015). Simon and Goes (2018) noted that a study with a phenomenological approach includes a focus on participants who have had experiences that are similar, or the participants function in environments that are similar.

Descriptive phenomenology was the phenomenological approach selected for this study. Giorgi (2009) stressed that the focus of descriptive phenomenology is on concrete descriptions of the lived experiences of participants. Researchers identify a phenomenon to study, collect data from participants who have lived experiences with the phenomenon, analyze the data reflectively, and identify general themes about the phenomenon (Giorgi, 2009). In this research, the phenomenon was virtual-team leadership, and the data came from 20 virtual-team leaders.

This study involved exploring the lived experiences of effective virtual-team leaders. These lived experiences were important in making the virtual-team leaders productive. The result in phenomenological studies is an understanding of a phenomenon as seen through the eyes of participants who have had the opportunity to experience it (Giorgi, 2009). After reading a phenomenological study, the reader should have a better understanding of what it is like to experience the phenomenon studied. The findings in

this study indicated the importance of communication and instilling trust between virtual-team leaders and team members. These findings can be beneficial to virtual-team leaders and team members.

Interpretation of the Findings

The focus of this was virtual-team leaders, the characteristics of effective virtual-team leaders, and the leadership strategies used by these leaders. The findings in this study validated the findings of related research identified in the literature review. The literature in Chapter 2 included descriptions of various leadership strategies of virtual-team leaders versus traditional face-to-face leaders, leadership challenges of virtual-team leaders, improving communication of virtual teams, and instilling trust of virtual teams.

During the interview process, the virtual-team leaders provided detailed and in-depth responses related to their lived experiences as virtual-team leaders. They discussed their leadership challenges, the leadership strategies to meet these challenges, the differences between virtual-team leaders' and face-to-face leaders' management strategies, and strategies to improve communication and instill trust among virtual team members.

In addition, the literature review discussions revealed the strategy that virtual-team leaders should use to meet their challenges is open communication with the team members. The results validated the significance of communication and face-to-face connections as the most common leadership challenges to virtual-team leaders. The research verified that virtual-team leaders are constantly attempting to establish open communication with virtual team members.

The literature review incorporated vital points from the literature, including virtual-team leaders' need to develop clear roles and responsibilities of the team members and developing clear communication with the team members. When virtual-team leaders develop clear roles and responsibilities, team members can have a personal relationship with their team leader. Additionally, team members do not feel isolated at their remote location, because of the lack of communication from the team leader. The virtual-team leaders mentioned creating a constant dialogue with the team members that can take place via telephone, text, or e-mail, as long as it occurs on a constant and consistent basis. Virtual-team leaders should get to know their team members on a personal level, as constant communication lets team members know they are part of the team.

The central findings of this research study were the prevalent themes from the responses of the participants to five of the nine interview questions. These interview questions supported the two research questions for this study. Interview Questions 1-3 supported Research Question 1. Ten identified prevalent themes related to Research Question 1 were based on three associated nodes (see Table 3, 4, and 5). Those three nodes were common leadership challenges, strategies to manage these challenges, and comparing virtual-team leaders' strategies to face-to-face leaders' strategies.

The primary theme in each of the three associated nodes with Research Question 1 was communication. In the common leadership challenges node, 15 of the 20 participants (75%) indicated that communication was the most common leadership challenge faced by virtual-team leaders. P01 replied, "The common challenges are in communication, because you are doing it across a number of time zone differences."

When team members are in different time zones, communication can be a challenge. Therefore, leaders need strategies to manage the challenges. The findings of my study confirmed the literature on common virtual-team leadership challenges. The second node was strategies to manage these virtual team challenges.

In the node on the strategies to manage virtual-team leader challenges, 11 participants mentioned open communication. In addition, five other participants stated that regularly scheduled times for communication would be a beneficial strategy to manage any leadership challenges. These forms of communication were in the literature review also. P05 stated, "Make sure you use a set time that you are communicating or having your meetings." Virtual team members then know and understand that they will have a set time to talk with the team leader each week. The findings of this study served to confirm the literature review findings relating to strategies to manage virtual-team leader challenges. The following discussion includes findings from the literature review and research on comparing virtual-team leader and face-to-face team leader strategies.

In comparing the strategies of the virtual-team leader and the face-to-face team leader, communication was the prevalent theme. Seventeen of 20 participants (85%) mentioned means of communication, and 11 of 20 participants (55%) discussed clarity of communication. Levasseur (2012) stated virtual-team leaders need to provide better role clarity and an effective communication strategy. P08 stated, "As a face-to-face leader, you use more of your people skills; as a virtual leader, you use your organizational skills to provide clear and concise communication to define roles and responsibilities of the team members." Nine of the 20 participants (45%) mentioned team members

understanding their roles and responsibilities on the team. It is important for team members to know and understand their individual roles with virtual teams (Lepsinger, 2012). P02 responded similarly, proclaiming, “Virtual-team leaders must clearly and concisely outline the roles of the virtual team members, so they know what is expected of them.” The findings in this study confirmed the literature review research related to comparing strategies of virtual team and face-to-face leaders.

Interview Questions 5 and 6 pertained to Research Question 2. There were two nodes and six prevalent themes associated with these interview questions (see Table 6 and 7). The two nodes were strategies to improve virtual team communication and strategies to instill trust in virtual teams.

In the node strategies to improve communication, 14 participants discussed the theme open and scheduled communication. The literature indicated that virtual-team leaders need to build relationships with the team members proactively (Newell et al., 2007). The participants indicated that building team relationships is a primary concern for team leaders. P20 explained, “It’s all about communication, and the burden is on me. I need to be organized and schedule communication times to get to know my team members on a personal basis.”

A second theme for improving communication is team leaders should effectively guide and direct the team members. Virtual-team leaders play an important role in fostering innovation and keeping team members engaged in the decision-making process (Gajendran & Joshi, 2012). P11 stated, “Being available for your team members will be

beneficial to improve communication. Being there to clarify goals and objectives, along with providing leadership guidance also improves communication.”

Various aspects of communication continued as major themes for improving virtual team communications. Another theme for the strategies to improve communication node is multimodal communication. Thirteen participants (65%) stated that multimodal communication was a viable strategy to improve virtual team communication. Organizations have virtual teams that communicate primarily by telecommunications and information technologies (Levasseur, 2012). P02 replied, “Multi-modal communication is the critical strategy to improve communication. There has to be a mix of phone calls, emails, text, and Skype to be effective.” P19 stated, “You have to be able to communicate with the phone, conference calls, video teleconferencing, emails, and other means of communication to reach your team members.” The findings of this study supported the literature review relating to the strategies to improve the communication of virtual-team leaders.

The strategies to instill trust in the virtual team node generated two prevalent themes: promoting growth and promoting a nonthreatening environment. Thirteen participants (65%) discussed the promoting growth aspect to instill trust in virtual teams. Nine of the 20 participants (45%) mentioned promoting a nonthreatening environment. Trust among virtual team members improves when there is positive knowledge management and knowledge transfer between team members (Goodman & Bray, 2014). Participant 12 mentioned, “In a non-threatening environment, team members know they can bring ideas to the table, and the ideas will be listened to.” Information from the

literature review directly related to the findings in this study pertaining to strategies to instill trust in virtual team members.

The basis of the conceptual framework for this study was the theories of transformational leadership and LMX. As noted in Chapter 2, a primary reason for transformational leadership and LMX being important to the success of virtual teams and virtual-team leaders is the emphasis on the relationship between leaders and team members. Transformational leadership is the most applicable and effective form of leadership with virtual teams (Mukherjee et al., 2012). Both concepts are crucial to the success of virtual-team leaders and the success of virtual teams, particularly when the leaders are effectively communicating with the employees.

Transformational leadership is a leadership approach that causes change in individuals and social systems and creates valuable and positive change in subordinates (Braun et al., 2013). In transformational leadership, the goal is to develop followers into leaders. With LMX, the leader develops a relationship with the subordinates (members), and the quality of the relationship can influence the subordinates' job performance, job satisfaction, and decision making (Goh & Wasko, 2012). Furthermore, the focus of both concepts is the relationship between leaders and their employees. In both transformational leadership and LMX, the leaders support the followers in becoming more engaged and productive in their work.

Transformational leadership and LMX emphasize open communication and positive feedback from the team leader. As mentioned by Participant 5, "You can earn the trust of your team members by giving enough support to them, recognizing them for a job

well done, and finding ways to complement them on their efforts.” From Participant 2, “We treat our employees like gold, because we treat them with respect. That positive feedback, produces trust and open communication from the team members.”

Transformational leadership and LMX are successful strategies when there are positive communication and feedback between leaders and employees.

Virtual teams and traditional face-to-face teams are different and therefore need different types of organizational leadership. Specific differences existed in trust, communication frequency, and clear roles. Due to the lack of face-to-face contact with virtual teams, the process of establishing trust can be difficult. When team members build relationships, they also develop trust. Communication is much less frequent in virtual teams than in face-to-face teams, which can lead to a lack of team collaboration and fewer team activities. In contrast, collocated teams have easy access to the team leader and can have daily interactions. Participant 1 stated, “It is easier to walk down to somebody’s office and ask a question, as opposed to sending an email, text or waiting for a conference call.” In virtual teams, it is important that team members have clearly defined roles and understand those roles. When team members know their responsibilities and know what their leaders expect from them, the chances for success increase. Organizational leadership should view virtual teams and face-to-face teams differently, and leaders who recognize this fact have teams that are successful (DeRosa & Lepsinger, 2010). Team leaders who understand the difference early in a team’s existence can enhance a virtual team’s performance.

Limitations of the Study

In this research, I examined the lived experiences of 20 virtual-team leaders, with a focus of communication and trust among team members. This study included several limitations. Limitations are conditions that restrict the scope of the study and could affect the outcome and end results of the study (Simon & Goes, 2018). One limitation of the study was participants' bias. The phenomenology method allows the exploration of the participants' lived experiences. The participants could have exaggerated their responses. They could have overstated their importance or embellished the truth when discussing their individual characteristics and leadership abilities.

The sample size was a limitation concern in this study. The 20 participants were accurate for a phenomenological study; however, all industries were not represented in this study. I was able to reach data saturation and develop multiple themes shared by the participants. Another limitation was the use of telephone and electronic interviews, instead of being physically at the location of the interviews. Conducting the interviews in-person would have been beneficial to the study. Researchers who conduct interviews in person can monitor the reactions of the participants in real time and could have a physical connection with the participants.

A final limitation of the study was the opportunity for biases because there was only one researcher and one data transcriber. Semistructured interviews worked well, because this form of interview allowed new ideas to emerge during the interview process. The data collection and analysis process helped alleviate potential bias through the

collection of detailed information through the interviews and then data analysis via NVivo 11.

Recommendations

This qualitative phenomenological study involved exploring and describing the lived experiences of effective virtual-team leaders and the operational strategies employed to lead these virtual teams. The goal of this study was to capture the lived experiences of virtual-team leaders to identify what makes them successful. There are several recommendations to study virtual teams and virtual-team leaders further. The first recommendation is to conduct a phenomenological study with both virtual-team leaders and virtual team members to gain different viewpoints on virtual teams. A second recommendation is to conduct a study of virtual team members and face-to-face team members in the same department of the same industry to compare and contrast perspectives on leadership strategies. A third recommendation would be to conduct a study with military virtual-team leaders. This recommendation could include all branches of the military or just one branch. The military consistently works with personnel in different geographical locations, so this could generate an interesting study.

Implications

The results of the study may influence social change through the rich textured experiences detailed within the interviews. The implications of positive social change may improve the effectiveness of virtual-team leaders leading virtual teams. Managers could use the results from this study for promoting positive social change by

understanding the lived experiences of virtual-team leaders, which could give virtual teams a better opportunity to be successful.

The findings in this study may provide current and future virtual-team leaders with the knowledge needed to make wiser decisions regarding management strategies that lead to positive social change within business organizations. Managers may use the results from this study to bring about positive social change by determining the effective strategies used to lead virtual teams more effectively. Business leaders and stakeholders may have an interest in the findings from this study because the research will include the best practices for leading virtual teams through trust, communication, and knowledge management.

Organizational leaders might use the results from this study for positive social change, as this study may shed light on the effective strategies used to lead virtual teams more successfully. Managers providing the best practices for leading virtual teams through trust, communication, and technology affect social change. The results from this study may support social change by breaking down barriers to the global market. Some of those barriers are cross-cultural and diverse virtual teams. Virtual-team leaders must effectively lead cross-cultural and diverse virtual teams in a global market.

Conclusion

This study involved exploring and describing the lived experiences of effective virtual-team leaders. The findings from this study may be beneficial to organizational leaders to identify leadership strategies for virtual-team leaders to lead virtual teams successfully. This study identified the common leadership challenges of virtual-team

leaders. Some of the major leadership challenges for virtual-team leaders were (a) communication, (b) face-to-face connections, (c) understanding team and organizational dynamics and (d) accountability. The findings from this study showed that virtual-team leaders could incorporate numerous strategies to manage these challenges. These strategies included (a) open communication; (b) regularly scheduled times for communication; (c) clearly stated mission, goals, and objectives; and (d) setting more face-to-face meetings and developing activities with the remote teams.

This study also revealed strategies to improve virtual team communication and strategies to instill trust among virtual-team leaders and team members. The strategies to improve communication were (a) open and scheduled communication, (b) multimodal communication, (c) guide and direct the team members, and (d) build rapport and connect with the virtual team members. The strategies to instill trust between the virtual-team leader and team members were (a) promoting growth, (b) providing a nonthreatening environment, and (c) supporting team members.

The lived experiences of the virtual-team leaders indicated that the leaders need to use all modes of communication with the team members. Virtual-team leaders need to use phones, text, e-mail, Skype, and other means of communication to connect with virtual team members. By doing this, the team leaders will be able to have more open and scheduled communication with the team members, which will allow the virtual-team leaders to better communicate the mission, goals, and objectives. The team leaders can also explain the team roles and responsibilities. In addition, the virtual-team leaders can

get to know the team members on a more personal level, which can be beneficial to the success and effectiveness of the virtual team.

Future researchers will be able to explore the lived experiences of virtual-team leaders to understand the operational strategies they used to be successful. Organizational leaders will understand the differences between virtual-team leaders and face-to-face team leaders. This study also included strategies to improve communication within virtual teams and strategies to instill trust among virtual-team leaders. Organizations and future virtual-team leaders may therefore gain a better understanding of how to lead virtual teams successfully.

References

- Aarons, G. A. (2006). Transformational and transactional leadership: Association with attitudes toward evidence-based practice. *Psychiatric Services, 57*, 1162-1169. Retrieved from <http://ps.psychiatryonline.org/>
- Abu Mansor, N. N., Mirahsani, S., & Saidi, M. I. (2012). Investigating possible contributors towards “organizational trust” in effective “virtual team” collaboration context. *Procedia—Social and Behavioral Sciences, 57*, 283-289. doi:10.1016/j.sbspro.2012.09.1187
- Aiken, M., Gu, L., & Wang, J. (2013). Task knowledge and task-technology fit in a virtual team. *International Journal of Management, 30*, 3-11. Retrieved from <http://www.internationaljournalofmanagement.co.uk/>
- Altschuller, S., & Benbunan-Fich, R. (2013). The pursuit of trust in ad hoc virtual teams: How much electronic portrayal is too much? *European Journal of Information Systems, 22*, 619-636. doi:10.1057/ejis.2012.39
- Anantatmula, V., & Thomas, M. (2010). Managing global projects: A structured approach for better performance. *Project Management Journal, 41*(2), 60-72. doi:10.1002/pmj.20168
- Asencio, H., & Mujkic, E. (2016). Leadership behaviors and trust in leaders: Evidence from the US federal government. *Public Administration Quarterly, 40*, 156-179. Retrieved from <http://paq.spaef.org/>

- Avolio, B., Sosik, J., Kahai, S., & Baker, B., (2014). E-leadership: Re-examining transformations in leadership source and transmission. *Leadership Quarterly*, 25, 105-131. doi:10.1016/j.leaqua.2013.11.003
- Bagnasco, A., Ghirotto, L., & Sasso, L. (2014). Theoretical sampling. *Journal of Advanced Nursing*, 70(11), e6-e7. doi:10.1111/jan.12450
- Baker, S. E., & Edwards, R. (2012). How many qualitative interviews is enough? Retrieved from: <http://eprints.ncrm.ac.uk>
- 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/>
- Bass, B. M. (1985). *Leadership and performance beyond expectation*. New York, NY: Free Press.
- Benetytė, D., & Jatuliavičienė, G. (2013). Building and sustaining trust in virtual teams within organizational context. *Regional Formation & Development Studies*, 10(2), 18-30. doi:10.15181/rfds.v10i2.138
- Bentz, V. M., & Shapiro, J. J. (1998). *Mindful enquiry in social research*. Thousand Oaks, CA: Sage.
- Berg, R. W. (2012). The anonymity factor in making multicultural teams work: Virtual and real teams. *Business Communication Quarterly*, 75(4), 404-424. doi:10.1177/1080569912453480

- Bergiel, B. J., Bergiel, E. B., Balsmeier, P. W. (2008). Nature of virtual teams: A summary of their advantages and disadvantages, *Management Research News*, 31(2), 99-110. doi:10.1108/01409170810846821
- Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. *Leadership Quarterly*, 24, 270-283. doi:10.1016/j.leaqua.2012.11.006
- Browning, P. (2014). Why trust the head? Key practices for transformational school leaders to build a purposeful relationship of trust. *International Journal of Leadership in Education*, 17, 388-409. doi:10.1080/13603124.2013.844275
- Bull Schaefer, R. A., & Erskine, L. (2012). Virtual team meetings: Reflections on a class exercise exploring technology choice. *Journal of Management Education*, 36, 777-801. doi:10.1177/1052562912436912
- Burch, T. C., & Guarana, C. L. (2014). The comparative influences of transformational leadership and leader-member exchange on follower engagement. *Journal of Leadership Studies*, 8(3), 6-25. doi:10.1002/jls.21334
- Burns, J. M. (1978). *Leadership*. New York, NY: Harper & Row.
- Caligiuri, P. (2013). Developing culturally agile global business leaders. *Organizational Dynamics*, 42, 175-182. doi:10.1016/j.orgdyn.2013.06.002
- Chan, S., & Mak, W. (2012). Benevolent leadership and follower performance: The mediating role of leader-member exchange (LMX). *Asia Pacific Journal of Management*, 29, 285-301. doi:10.1007/s10490-011-9275-3

- Chan, Z. C., Fung, Y. L., & Chien, W. T. (2013). Bracketing in phenomenology: Only undertaken in the data collection and analysis process. *Qualitative Report, 18*(30), 1-9. Retrieved from <http://tqr.nova.edu/>
- 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. *Leadership Quarterly, 27*, 745-764. doi:10.1016/j.leaqua.2016.05.002
- Childers, W. H. (2009). *Transformational leadership and its relationship to trust and behavioral integrity* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3402113)
- Chyng-Yang, J. (2013). Facilitating trust in virtual teams: The role of awareness. *Advances in Competitiveness Research, 21*, 61-77. Retrieved from http://www.eberly.iup.edu/ASCWeb/journals_acr.html
- Collins, N., Chou, Y., & Warner, M. (2014). Member satisfaction, communication and role of leader in virtual self-managed teamwork: Case studies in Asia-Pacific region. *Human Systems Management, 33*(4), 155-170. doi:10.3233/HSM-140824
- Conine, T. E. (2014). The virtual simulation: A tool for leadership education in global corporations. *Global Business & Organizational Excellence, 33*(5), 17-28. doi:10.1002/joe.21560
- Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum, 1*, 89-91. doi:10.1188/14.onf.89-91

- Cowan, L. D. (2014). e-leadership: Leading in a virtual environment: Guiding principles for nurse leaders. *Nursing Economics*, 32(6), 312-319, 322. Retrieved from <http://www.nursingeconomics.net>
- Cramton, C., & Hinds, P. J. (2009). The dialectical dynamics of nested structuration in globally distributed teams. *Academy of Management Annual Meeting Proceedings*. doi:10.5465/AMBPP.2009.44259989
- Crisp, C. B., & Jarvenpaa, S. L. (2013). Swift trust in global virtual teams. *Journal of Personnel Psychology*, 12, 45-56. doi:10.1027/1866-5888/a000075
- Dabke, D. (2016). Impact of leader's emotional intelligence and transformational behavior on perceived leadership effectiveness: A multiple source view. *Business Perspectives & Research*, 4, 27-40. doi:10.1177/2278533715605433
- Dennis, D., Overholt, M., & Vickers, M. (2014). The new dominance of virtual teams and leaders. *MWorld*, 13(2), 18-21. Retrieved from <https://issuu.com/americanmanagementassociation/docs/mworld-summer-2014/20>
- Dennis, D. J., Meola, D., & Hall, M. J. (2013). Effective leadership in a virtual workforce. *T+D*, 67(2), 46-51. Retrieved from <https://www.td.org/Publications/Magazines/TD>
- DeRosa, D., & Lepsinger, R. (2010). *Virtual team success: A practical guide for working and leading from a distance*. San Francisco, CA: Jossey-Bass.
- Derven, M. (2016). Diversity & inclusion are essential to a global virtual team's success. *Talent Development*, 70(7), 54. Retrieved from <https://www.td.org/Publications/Magazines/TD>

- Duran, V., & Popescu, A. (2013). The challenge of multicultural communication in virtual teams. *Procedia—Social and Behavioral Sciences, 109*, 365-369. doi:10.1016/j.sbspro.2013.12.473
- Dworkin, S. L. (2012). Sample size policy for qualitative studies using in-depth interviews. *Archives of Sexual Behavior, 41*, 1319-1320. doi:10.1007/s10508-012-0016-6
- Eisenbeiß, S. A., & Brodbeck, F. (2014). Ethical and unethical leadership: A cross-cultural and cross-sectoral analysis. *Journal of Business Ethics, 122*, 343-359. doi:10.1007/s10551-013-1740-0
- Eissa, G., Fox, C., Webster, B. D., & Kim, J. (2012). A framework for leader effectiveness in virtual teams. *Journal of Leadership, Accountability and Ethics, 9*(2), 11-22. Retrieved from <http://www.na-businesspress.com>
- Embree, L. (1996). *Encyclopedia of phenomenology*. Dordrecht, The Netherlands: Kluwer.
- Englander, M. (2012). The interview: Data collection in descriptive phenomenological human scientific research. *Journal of Phenomenological Psychology, 43*, 13-35. doi:10.1163/156916212X632943
- Englander, M. (2016). The phenomenological method in qualitative psychology and psychiatry. *International Journal of Qualitative Studies on Health and Well-being, 11*, 1-11. doi:10.3402/qhw.v11.30682

- Espinosa, J. A., Nan, N., & Carmel, E. (2015). Temporal distance, communication patterns, and task performance in teams. *Journal of Management Information Systems*, 32, 151-191. doi:10.1080/07421222.2015.1029390
- Esposito, L. J. (2010, June). Some thoughts on the use of field tests to evaluate survey questionnaires. Retrieved from https://wwwn.cdc.gov/qbank/qem/esposito_fieldstudies_qem_primary_paper.pdf
- Fan, K-T., Chen, Y-H., Wang, C-W., & Chen, M. (2014). E-leadership effectiveness in virtual teams: motivating language perspective. *Industrial Management & Data Systems*, 114, 421-437. Retrieved from <http://www.emeraldinsight.com/loi/imds>
- Ferrazzi, K. (2014). Managing yourself. *Harvard Business Review*, 92(12), 120-123. Retrieved from <https://hbr.org/>
- Fleishman, H. (2015, July 29). 13 businesses with brilliant global marketing strategies [Web log post]. Retrieved from <http://blog.hubspot.com/blog/tabid/6307/bid/33857/10-Businesses-We-Admire-for-Brilliant-Global-Marketing.aspx>
- Gaan, N. (2012). Collaborative tools and virtual team effectiveness: An inductively derived approach in India's software sector. *Decision* 39, 5-27. Retrieved from <http://connection.ebscohost.com/c/articles/>
- Gajendran, R. S., & Joshi, A. (2012). Innovation in globally distributed teams: The role of LMX, communication frequency, and member influence on team decisions. *Journal of Applied Psychology*, 97, 1252-1261. doi:10.1037/a0028958

- Garcia, S. (2014). Developing leaders for a networked economy. *Talent Development*, 68(9), 42-47. Retrieved from <https://www.td.org/Publications/Magazines/TD/TD-Archive>
- Gatlin-Watts, R., Carson, M., Horton, J., Maxwell, L., & Maltby, N. (2007). A guide to global virtual teaming. *Team Performance Management: An International Journal*, 13, 47-52. doi:10.1108/13527590710736725
- Gill, M. J. (2014). The possibilities of phenomenology for organizational research. *Organizational Research Method*, 17, 118-137. doi:10.1177/1094428113518348
- Giorgi, A. (2009). *The descriptive phenomenological method in psychology: A modified Husserlian approach*. Pittsburgh, PA: Duquesne University Press.
- Giuffrida, R., & Dittrich, Y. (2015). A conceptual framework to study the role of communication through social software for coordination in globally-distributed software teams. *Information & Software Technology*, 63, 11-30. doi:10.1016/j.infsof.2015.02.013
- Given, L. (2008). *The Sage encyclopedia of qualitative research methods*. Los Angeles, CA: Sage.
- Gladden, M. (2014, November 13-14). *Leveraging the cross-cultural capacities of artificial agents as leaders of human virtual teams*. Paper presented at the 10th Annual European Conference on Management Leadership & Governance, Zabreb, Croatia.

- Goh, S., & Wasko, M. (2012). The effects of leader-member exchange on member performance in virtual world teams. *Journal of the Association for Information Systems, 13*, 861-885. Retrieved from <http://aisel.aisnet.org/>
- 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
- Goodman, N., & Bray, S. M. (2014). Preparing global virtual teams for success. *Training, 51*(5), 64-65. Retrieved from <https://trainingmag.com/trgmag-article/preparing-global-virtual-teams-success>
- Govindarajan, V., & Gupta, A. K. (2001). Building an effective global business team. *MIT Sloan Management Review, 42*(4), 63-71. Retrieved from <http://sloanreview.mit.edu>
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly, 6*, 219-247. doi:10.1016/1048-9843(95)90036-5
- Grinnell, L., Sauers, A., Appunn, F., & Mack, L. (2012). Virtual teams in higher education: The light and dark side. *Journal of College Teaching & Learning, 9*, 65-77. Retrieved from <http://www.cluteinstitute.com/journals/journal-of-college-teaching-learning-tlc/>
- Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods, 3*, 42-55. Retrieved from

<https://in.sagepub.com/en-in/sas/international-journal-of-qualitative-methods/journal202499#tabview=manuscriptSubmission>

- Guillemette, M., & Golden, M. (2012). Herding virtual cats: How to lead multiple-office and off-site teams. *CPA Practice Management Forum*, 8, 8. Retrieved from <http://www.heinonline.org>
- Guinaliu, M., & Jordán, P. (2016). Building trust in the leader of virtual work teams. *Spanish Journal of Marketing*, 20, 58-70. doi:10.1016/j.reimke.2016.01.003
- Gurursamy, S., & Balaji, P. (2013). Managing global software projects through knowledge sharing: A study with reference to co-located and globally-distributed software teams. *Independent Business Review*, 6(2), 68-91. Retrieved from <http://www.sb.iub.edu.bd/ibr/>
- Hamersly, B., & Land, D. (2015). Building productivity in virtual project teams. *Revista de Gestão e Projetos*, 6, 1-14. doi:10.5585/gep.v6i1.305
- Han, S. J., & Beyerlein, M. (2016). Framing the effects of multinational cultural diversity on virtual team processes. *Small Group Research*, 47, 351-383. doi:10.1177/1046496416653480
- Harper, M., & Cole, P. (2012). Member checking: Can benefits be gained similar to group therapy? *Qualitative Report*, 17, 510–517. Retrieved from <http://www.nova.edu/ssss/QR>
- Hart, R. K. (2016). Informal virtual mentoring for team leaders and members. *Advances in Developing Human Resources*, 18, 352-368. doi:10.1177/1523422316645886

- 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
- Hope, K. (2015, June 23). The challenges of going global. Retrieved from <http://www.bbc.com/news/business-33224596>
- Hosseini, M. R., Chileshe, N., Ghoddousi, P., Jahanshahloo, G. R., Katebi, A., & Saeedi, M. (2013). Performance evaluation for global virtual teams (GVTs): Application of data envelopment analysis (DEA). *International Journal of Business and Management, 8*(19), 122-136. doi:10.5539/ijbm.v8n19p122
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse Researcher, 20*(4), 12-17. doi:10.7748/nr2013.03.20.4.12.e326
- Iorio, J., & Taylor, J. E. (2015). Precursors to engaged leaders in virtual project teams. *International Journal of Project Management, 33*, 395-405. doi:10.1016/j.ijproman.2014.06.007
- Jawadi, N., & Bonet-Fernandez, D. (2013). *An examination of the factors influencing relationship building and performance in virtual R&D project teams* (No 2013-040). Retrieved from <http://www.ipag.fr/fr/accueil/la-recherche/publications-WP.html>
- Kangas, H. M. (2013). The development of the LMX relationships after a newly appointed leader enters an organization. *Human Resource Development International, 16*, 575-589. doi:10.1080/13678868.2013.825438

- Kuesten, C. (2013). Leading global project teams: The new leadership challenge - by Russ Martinelli, Tim Rahschulte and Jim Waddell. *Journal of Product Innovation Management*, 30, 400-402. doi:10.1111/j.1540-5885.2012.1006_2.x
- Kulesza, B. (2015). Leading global teams virtually. *Strategic Finance*, 97(4), 19-21. Retrieved from <http://sfmagazine.com>
- Lam, W., Huang, X., & Snape, E. (2007). Feedback-seeking behavior and leader-member exchange: Do supervisor-attributed motives matter? *Academy of Management Journal*, 50, 348-363. doi:10.5465/AMJ.2007.24634440
- Leithwood, K., & Jantzi, D. (2005). Transformational leadership. In B. Davies (Ed.), *The essentials of school leadership* (pp. 31-43). doi:10.1080/15700760500244769
- Lepsinger, R. (2012). The virtual challenge: It's more than cultural differences. *People & Strategy*, 35, 10-11. Retrieved from <http://www.hrps.org/>
- Lepsinger, R., & DeRosa, D. (2015, May/June). How to lead an effective virtual team. *Ivey Business Journal*, 2-6. Retrieved from <http://iveybusinessjournal.com>
- Levasseur, R. E. (2012). People skills: Leading virtual teams—A change management perspective. *Interfaces*, 42, 213-216. doi:10.1287/inte.1120.0634
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Malangwasira, T. E. (2013). Demographic differences between a leader and followers tend to inhibit leader-follower exchange levels and job satisfaction. *Journal of Organizational Culture, Communications & Conflict*, 17(2), 63-106. Retrieved from <http://www.alliedacademies.org/journal-of-organizational-culture-communications-and-conflict/>

- Mandzuk, C. (2014). Challenges of leading a virtual team: More than meets the eye. *T+D*, 68, 20. Retrieved from <https://www.td.org/Publications/Magazines/TD>
- Marcus, B., Weigelt, O., Hergert, J., Gurt, J., & Gelléri, P. (2016). The use of snowball sampling for multi source organizational research: Some cause for concern. *Personnel Psychology*, 69(2), 1-39. doi:10.1111/peps.12169
- Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 11(3), 1-19. Retrieved from <http://www.qualitative-research.net/index.php/fqs/article/view/1428/3027>
- Maude, B. (2011). *Managing cross-cultural communication: Principles and practice*. New York, NY: Palgrave MacMillan.
- Maxfield, D. (2014). Making long-distance relationships work. *Training*, 51(5), 34-35. Retrieved from <https://trainingmag.com/>
- Maxwell, J. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Los Angeles, CA: Sage.
- McCallin, A., Scott, H., & Johnston, T. (2009). Which grounded theory? Retrieved from <http://www.groundedtheoryonline.com/what-is-grounded-theory/>
- McCloskey, M. W. (2015). What is transformational leadership? Retrieved from <http://www.people.bethel.edu/>
- Mendenhall, M. E., & Bird, A. (2013). In search of global leadership. *Organizational Dynamics*, 42(3), 167-174. doi:10.1016/j.orgdyn.2013.06.001

- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: Sage.
- 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
- Morse, J. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research, 25*, 1212-1222.
doi:10.1177/1049732315588501
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Moynihan, D. P., Pandey, S. K., & Wright, B. E. (2012). Setting the table: How transformational leadership fosters performance information use. *Journal of Public Administration Research and Theory, 22*, 143-164.
doi:10.1093/jopart/mur024
- Mukherjee, D., Lahiri, S., Mukherjee, D., & Billing, T. (2012). Leading virtual teams: How do social, cognitive, and behavioral capabilities matter? *Management Decision, 50*, 273-290. doi:10.1108/00251741211203560
- Nachmias, C. F., & Nachmias, D. (2008). *Research methods in the social sciences* (7th ed.). New York, NY: Worth.
- Newell, S., David, G., & Chand, D. (2007). An analysis of trust among globally distributed work teams in an organizational setting. *Knowledge and Process Management, 14*(3), 158-168. doi:10.1002/kpm.284

- Nichols, T., & Yildirim, S. (2014). An acquisition of leadership: Cultural differences and difficulties. *Journal of Case Research in Business and Economics*, 5, 1-5.
Retrieved from <http://www.aabri.com/jcrbe.html>
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence Based Nursing*, 18(2), 34-35. doi:10.1136/eb-2015-102054
- Oshri, I., van Fenema, P., & Kotlarsky, J. (2008). Knowledge transfer in globally distributed teams: The role of transactive memory. *Information Systems Journal*, 18, 593-616. doi:10.1111/j.1365-2575.2007.00243.x
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Thousand Oaks, CA: Sage.
- 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(5), 68-79. doi:10.5539/ibr.v7n5p68
- Pitts, V. E., Wright, N. A., & Harkabus, L. C. (2012). Communication in virtual teams: The role of emotional intelligence. *Journal of Applied Psychology*, 92, 595-615. doi:10.1037/0021-9010.92.3.595
- Purvanova, R. K., & Bono, J. E. (2009). Transformational leadership in context: Face-to-face and virtual teams. *Leadership Quarterly*, 20, 343-357. doi:10.1016/j.leaqua.2009.03.004
- Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management*, 8, 238-264. doi:10.1108/11766091111162070

- Quisenberry, W., & Burrell, D. N. (2012). Establishing a cycle of success by utilizing transactional leadership, technology, trust, and relationship building on high performance self-managed virtual teams. *Review of Management Innovation & Creativity*, 5(16), 97-116. Retrieved from <http://www.intellectbase.org>
- Rabotin, M. B. (2014). The Intricate web connecting virtual teams. *T+D*, 68(4), 32-35. Retrieved from <https://www.td.org/Publications/Magazines/TD>
- Reed, A. H., & Knight, L. V. (2010). Project risk differences between virtual and co-located teams. *Journal of Computer Information Systems*, 51, 19-30. doi:10.1016/j.ijproman.2009.08.002
- Saarinen, J. (2016). *Managing global virtual teams* (Doctoral dissertation). Retrieved from <https://aaltodoc.aalto.fi/>
- Salmons, J. (2012). Designing and conducting research with online interviews. In J. Salmons (Ed.), *Cases in online interview research* (pp. 1-30). Thousand Oaks, CA: Sage.
- Scandura, T. A., & Pellegrini, E. K. (2008). Trust and leader-member exchange: A closer look at relational vulnerability. *Journal of Leadership & Organizational Studies*, 15(2), 101-110. doi:10.1177/1548051808320986
- Schmidt, G. B. (2014). Virtual leadership: An important leadership context. *Industrial & Organizational Psychology*, 7, 182-187. doi:10.1111/iops.12129
- Schwandt, T. (2015). *The SAGE dictionary of qualitative inquiry* (4th ed.). Los Angeles, CA: Sage.

- Serban, A., Yammarino, F. J., Dionne, S. D., Kahai, S. S., Hao, C., McHugh, K. A., . . . Peterson, D. R. (2015). Leadership emergence in face-to-face and virtual teams: A multi-level model with agent-based simulations, quasi-experimental and experimental tests. *Leadership Quarterly*, *26*, 402-418.
doi:10.1016/j.leaqua.2015.02.006
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, *22*(2), 63-75. doi:10.3233/EFI-2004-22201
- Simon, M., & Goes, J. (2018). *Dissertation and scholarly research: Recipes for success* (2018 ed.). Seattle, WA: Dissertation Success.
- Slade, A. (2015). The psychology of virtual leadership. *TD: Talent Development*, *69*(3), 12. Retrieved from <https://www.td.org/Publications/Magazines/TD>
- Smite, D., Kuhrmann, M., & Keil, P. (2014). Virtual teams [Guest editors' introduction]. *IEEE Software*, *31*(6), 41-46. doi:10.1109/MS.2014.149
- Snellman, C. L. (2013). Virtual teams: Opportunities and challenges for e-leaders. *Procedia—Social and Behavioral Sciences*, *110*, 1251-1261.
doi:10.1016/j.sbspro.2013.12.972
- Snyder, K. (2015). Exploring digital culture in virtual teams: Implications for leading and developing distributed organisations. *Journal of Organisational Transformation & Social Change*, *12*, 211-233. doi:10.1080/14779633.2015.1101247
- Stahl, G. K., & Brannen, M. Y. (2013). Building cross-cultural leadership competence: An interview with Carlos Ghosn. *Academy of Management Learning & Education*, *12*, 494-502. doi:10.5465/amle.2012.0246

- Starks, H., & Brown-Trinidad, S. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research, 17*, 1372-1380. doi:10.1177/1049732307307031
- Tangirala, S., Green, S. G., & Ramanujam, R. (2007). In the shadow of the boss's boss: Effects of supervisors' upward exchange relationships on employees. *Journal of Applied Psychology, 92*, 309-320. doi:10.1037/0021-9010.92.2.309
- Terrell, S. R., & Rosenbusch, K. (2013). How global leaders develop. *Journal of Management Development, 32*, 1056-1079. doi:10.1108/JMD-01-2012-0008
- Van Manen, M. (2007). Phenomenology of practice. *Phenomenology & Practice, 1*, 11-30. Retrieved from <https://ejournals.library.ualberta.ca>
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly, 37*, 21-54. Retrieved from <http://www.misq.org>
- Walther, J. B. (1995). Relational aspects of computer-mediated communication: Experimental observations over time. *Organization Science, 6*, 186-203. doi:10.1287/orsc.6.2.186
- Warrick, D. D. (2011). The urgent need for skilled transformational leaders: Integrating transformational leadership and organization development. *Journal of Leadership, Accountability and Ethics, 8*(5), 11-26. Retrieved from <http://www.na-businesspress.com>

- Wilson, K. S., Sin, H., & Conlon, D. E. (2010). What about the leader in leader-member exchange? The impact of resource exchanges and substitutability on the leader. *Academy of Management Review*, 35, 358-372. Retrieved from <http://aom.org/>
- Wilton, R. D., Paez, A., & Scott, D. M. (2011). Why do you care what other people think? A qualitative investigation of social influence and telecommuting. *Transportation Research Part A: Policy and Practice*, 45, 269-282.
doi: 10.1016/j.tra.2011.01.002
- Winkler, I. (2010). *Contemporary leadership theories*. Heidelberg, Germany: Physica-Verlag.
- Xu, E., Huang, X., Lam, C. K., & Miao, Q. (2012). Abusive supervision and work behaviors: The mediating role of LMX. *Journal of Organizational Behavior*, 33, 531-543. doi:10.1002/job.768
- Yarmohammadian, M. H., Atighechian, G., Shams, L., & Haghshenas, A. (2011). Are hospitals ready to response to disasters? Challenges, opportunities and strategies of Hospital Emergency Incident Command System (HEICS). *Journal of Research in Medical Sciences*, 16, 1070-1077. Retrieved from <http://www.jrms.mui.ac.ir>
- Yavirach, N. (2012). *The impact of transformational and transactional leadership to subordinates' job satisfaction, organizational commitment affects to team effectiveness*. doi:10.2139/ssrn.2159035.
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, 48, 311-325. doi:10.1111/ejed.12014

- Yüksel, P., & Yıldırım, S. (2015). Theoretical frameworks, methods, and procedures for conducting phenomenological studies in educational settings. *Turkish Online Journal of Qualitative Inquiry*, 6, 1-20. doi:10.17569/tojqi.59813
- Zhu, W., Newman, A., Miao, Q., & Hooke, A. (2013). Revisiting the mediating role of trust in transformational leadership effects: Do different types of trust make a difference? *Leadership Quarterly*, 24, 94-105. doi:10.1016/j.leaqua.2012.08.004

Appendix A: Participants Recruitment Letter

Posting Title: Participants needed for Global Virtual-team leaders

Posting Description: I am currently attempting to recruit between 20 and 25 research participants for a study on global virtual-team leaders to discuss their lived experiences that made them successful.

The reason and benefit of the study: The reason for this study is to explore and describe the lived experiences of effective virtual-team leaders and the operational strategies employed to lead these virtual teams. The idea is to capture the lived experiences of virtual-team leaders to identify the traits and characteristics that make them successful. This study could potentially contribute to global virtual-team leaders utilizing their lived experiences to determine strategies to lead virtual teams. Your participation will be influential in providing an awareness of the lived experiences of virtual-team leaders to successfully lead virtual teams. Based on your lived experiences as virtual-team leaders, I would like to interview you to discuss the advantages and challenges of being virtual-team leaders. The criteria for the interviewees are as follows:

- Are you a former or current virtual-team leader?

- Do you have at least two years of experience as a virtual-team leader?

- Are you a virtual team supervisor in the Operational Management department?

- Did your virtual team have a minimum of three employees?

If you answered yes to all the above questions, I would be interested in communicating with you regarding participation in the study. The goal of the study is to explore the lived experiences of global virtual-team leaders to comprehend the advantages and challenges of virtual-team leaders.

If you meet the criteria above and are interested in participating in this study, please contact me.

Provide your name, email and a contact number. Your privacy and confidentiality will be protected! Your name will not be released to anyone.

I welcome the opportunity to discover your experiences as a virtual-team leader.

Appendix B: Demographic Questionnaire

All information is confidential and for the purposes of participation in this research only.

1. How many years have you been a virtual-team leader?
2. How many virtual team members are on your team?
3. Are you a virtual team supervisor in the Operational Management department?
4. What are the different geographical regions of your team members?
5. What industry do you work in?
6. What is your gender?