

LEADERSHIP'S ROLE IN BUILDING RELATIONSHIPS

A STUDY OF LEADERSHIP'S ROLE IN BUILDING RELATIONSHIPS AMONG VIRTUAL
TEAM MEMBERS

By

Danna Vinson Smith

Dissertation

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

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Abstract

This research study focused on leadership's role in building relationships among virtual team members. A qualitative case study, the research focused on organizations in the medical device industry within the Charlotte Metropolitan region of North Carolina. The research was formed using 15 open ended questions in an interview of 20 leaders of virtual teams. Each leader was interviewed individually and allowed to elaborate on their answers to help the researcher to thoroughly understand the approach used to help the relationships form among their virtual team members. During the interview, the discussion between the researcher and the leader being interviewed covered many topics that helped to identify the emerging themes for this research. After the interviews were completed, the responses were transcribed and coded. There were three themes which emerged during the data analysis process. These themes were (1) the importance of collaboration, (2) the need of sufficient tools for communication, and (3) the importance of face-to-face interaction to build relationships. The results of these emerging themes illustrates the importance for leaders of virtual teams to create opportunities for the team members to collaborate and develop a level of trust among their colleagues. This development of trust helps to ensure the team members will look to their colleagues for input on topics that may be difficult to resolve, as well as building relationships and often having conversations and resolving issues without input from leadership.

Key words: leadership, virtual teams, collaboration, communication, trust

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Approvals

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Dedication

I dedicate my research to my Husband and Daughter, my cheerleaders; to my Mother, the one that sacrificed so much for me; and to my Daddy and my Grandmother Mattie whom I hope are looking from heaven with a smile.

Acknowledgments

Delight yourself in the Lord, and he will give you the desires of your heart (Psalms 37:4).

All praises to God who forever blesses me, and I know He is the reason I am here.

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I give God all the glory and honor for this achievement. He is my strength and my song; He has given me victory (NLT Psalm 118:14).

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Section 1: Foundation of the Study

Proven strategies exist that can foster and sustain a team culture of high performance and shared values (Ruygrok, 2016). The first step in this process begins when leaders understand the importance of nurturing teams and then cultivate an environment that encourages and promotes strong, cohesive members. Levasseur (2017) suggested that teams are integral to the operation of today's organizations. Further, describing a perfect team as a diversified group of highly motivated, intelligent, and knowledgeable people with a blend of hard and soft skills. Marlow et al. (2017) revealed teams have become more prevalent within organizations and communication is a team process that is consistently identified as enhancing team performance.

Research on leadership behaviors explores a wealth of behaviors through which leaders influence team dynamics and performance (Ceri-Booms et al., 2017). Leading globally dispersed teams poses critical challenges, especially if the team members are not only physically separated, but also culturally diverse and their tasks are dynamic and complex (Muethel & Hoegl, 2010). Cultural diversity puts a further strain on team integration and cohesion. As team dispersion increases, the feasibility of the leader exerting direct influence on the team diminishes. Fewer opportunities are available to directly approach the team members and control their work processes. Adding to this difficulty is the diverse cultures that further strain team integration and cohesion. Although relationships are essential to the team's success, there is little research to support the role of leadership to aid in building and growth of the relationship among virtual team members and the impact this has on organizational success.

The Foundation of the Study section offers the basis for this qualitative multiple case research study on the role leadership plays in building relationships among team members. The background and purpose of the study is presented to represent the need for this research. The

nature of the study provides the methods used to guide the research. The research questions were developed and discussed giving support for the reason for the research and overarching problem statement. The research questions further aligned with relevant existing academic publications to reveal the need to close the gap. The original research project plan was developed through a conceptual framework with the relevant concepts, theories, actors, and constructs for the study. The researcher provided a listing of terms and definitions to support a cohesive understanding of the terms used. The researcher identified the assumptions, limitations and delimitations of the study to reveal the potential confines of this study and to allow for future study on this topic. Section 1 includes the (a) background of the problem, (b) problem statement, (c) purpose statement, (d) research questions, (e) nature of the study, (f) conceptual framework, (g) definition of terms, (h) assumptions, limitations, and delimitations, (i) significance of the study, (j) a review of the professional and academic literature (outline only), and (k) summary of Section 1 and transition.

Background of the Problem

Serving in a leadership capacity can bring an abundance of challenges in any organization. According to Luu et al. (2019), it is vital for team leaders to create enabling conditions that raise team members' awareness of the status quo and inspire them to challenge it in a positive light of the change vision and to be open to interacting with one another collectively to develop novel ideas. Understanding how the team will support the organization's strategic goals, creating a team that can help achieve these goals, and identifying the tools and processes required to enable the team members to meet these goals are all responsibilities of the leader. Team members perceive favor from working in an environment with the leader's empowerment and support or employee contribution to the team growth. The team members are more likely to

trust the organization, the team and each other, as well as share resources. Maduka et al. (2018) discuss an extensive list of needed virtual leadership capabilities, including the ability to build trust, the ability to build team orientation; possession of advanced communication skills; and the ability to assess team dynamics, conflict resolution, and many other issues. Liao (2017) recognized the importance of leadership's role in relationship-building by emphasizing the importance of the well-being of members, support for members, and the establishment of good relationships among members. Although these responsibilities are identified as part of the criteria for leadership in building relationships, there is no identification of the tools and processes needed to accomplish these requirements.

Classic leadership concepts applied in traditional team structures cannot simply be transferred to virtual leadership (Hoch & Kozlowski, 2014). Ford et al. (2017) discussed virtual team management, suggesting that while all successful managers ensure that they have provided the basic organizational support for their employees, the particularly effective leaders also ensure they build trustworthy relationships. Ceri-Booms et al. (2017) suggested leadership has important implications for individual, team, and organizational performance. This research, among others, represents the significant focus on how leadership behavior impacts the individual, team, and organizational performance (Ford et al., 2017; Hoch & Kozlowski, 2014). However, there has not been as much focus on the failure of leadership to aid in relationship building among virtual team members, and the impact on individual, team, and organizational success.

Problem Statement

The general problem addressed is the failure of leadership to aid in relationship-building among virtual team members resulting in a lack of organizational success. Maduka et al. (2018)

suggested people working in virtual teams use technology to communicate with one another, rather than working face-to-face or traveling to meetings; thus, making virtual team-working very different from traditional team-working. Liao (2017) has found that while relationship development among members in a traditional team can be organic and natural, virtual leaders might need to proactively guide the relationship-building process. Maes and Weldy (2018) added, in recent years, researchers have learned that team members receive little to no instruction on how to establish beneficial relations with their teammates—often members from other cultures. With the growth of virtual teams, leaders must take the initiative to foster relationships among the team members. The specific problem addressed was the potential failure of leadership to aid in relationship-building among virtual team members in business organizations in the Charlotte, North Carolina metropolitan area resulting in a lack of organizational success.

Purpose Statement

The purpose of this qualitative (flexible) multiple case study was to highlight the methods and tools used by leadership to aid in relationship-building among virtual team members. The more significant problem was explored through in-depth research of leadership's potential failure to encourage relationship-building among team members and its impact on companies' organizational success within the Charlotte, North Carolina, metropolitan area.

Research Questions

The purpose of this study was to explore how leadership aids in relationship-building among virtual team members. The key was to identify tools and processes leadership uses to identify how the lack of leadership's involvement in relationship-building among virtual team members will impact team and organizational success. Discussing leadership behaviors and the impact on team and organizational performance is a topic of many scholars (Ceri-Booms et al.,

2017; Ford et al., 2017; Hoch & Kozlowski, 2014). However, many of the discussions are based on face-to-face teams. With the growth of virtual teams, the discussion must be different due to the characteristics that are required for organizations with virtual teams, especially if there is a failure of leadership to aid in the development of relationship-building among team members. The following research questions sought to understand how leadership aids in relationship-building among virtual team members.

RQ1. What is the leader's role in relationship-building among team members in a virtual team?

RQ1a. What leadership actions defeat relationship-building among team members?

RQ1b. What leadership actions aid in relationship-building among team members?

RQ2. Why is it important for team members to build positive, cohesive relationships with each other in virtual teams?

RQ2a. What are the benefits of building positive relationships among team members?

RQ2b. What are the disadvantages of not building positive relationships among team members?

RQ3. What are the tools and processes used by leadership to aid in relationship-building among virtual team members?

The research questions were carefully constructed to evaluate the actions of leadership for a virtual team. Virtual teams, as discussed by Maduka et al. (2018), function differently than fact-to-face teams; therefore, the approach to leadership must be different. Virtual team members depend on video conferencing, emails, and other computer aided technology to communicate with each other. The research questions encompass (a) the actions of leadership that aid in, or defeat the relationship-building among team members, (b) the importance of having cohesion

among team members, and (c) the tools and processes needed to ensure relationship-building among virtual team members.

The actions of leadership that aid or defeat the relationship-building among team members is the first research question (RQ1) addressed. This research explored the tools and processes used by leadership to ensure relationships are established among virtual members of the team. Unlike face-to-face teams, virtual team members are not sitting in the same space and therefore don't have the same opportunities to build relationships. This research evaluated the actions of leadership and if these actions have a positive or negative impact in fostering the relationship-building among team members.

The focus of the second research question (RQ2) pertained to the importance of building positive cohesive relationships among team members. The focus of this inquiry was to show the implications, both positive and negative, of building cohesive relationships among team members. Important for this research was to understand the advantages of these relationships and, if any, the disadvantages and if there was any impact on organizational success. The second research question also focused on the role that leadership can or should play in building positive cohesive relationships.

Research question three (RQ3) directly addressed any tools and processes that are used to assist leadership in building the relationships among team members. In this research and to address this question, the researcher sought to identify the tools and processes used by leadership to achieve the goal of building strong relationships among team members. The researcher sought to identify any tools that were used across multiple companies or were common in particular industries. In addition, any similarities in processes were highlighted by the researcher.

Nature of the Study

Research approaches are the plans and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation (Creswell, 2014). This section of the study includes the primary research paradigms, including (a) constructivism, (b) pragmatism, (c) positivism, and (d) post-positivism. The chosen paradigm that fits the research studied is addressed and includes an explanation of why it was chosen. The research designs, including fixed, flexible, and mixed method are also discussed, and the chosen design for this research further explored to determine why the selected approach was the best fit for the research pertaining to leadership's role in relationship-building among team members. The methods of research are addressed, including triangulation and the methods used for triangulation.

Discussion of Research Paradigms

The philosophical view of the researcher always exudes itself in the research, mainly to identify why they chose qualitative, quantitative, or mixed method approaches for the research. These views further describe a general philosophical orientation about the world and the nature of research that a researcher brings to the study (Creswell, 2014). Kankam (2019) suggested studies of human behavior usually require the adoption of a research paradigm with the objective of improving the credibility and generalizability of the study. A paradigm serves as a basic model, which reflects in-depth knowledge of what researchers observe, coupled with the manner that they understand the model of a study. The author recognizes the four most broadly applied paradigms in research are post-positivism, positivism, pragmatism, and constructivism.

Post-Positivism. A highly objective view of a common, single reality, according to Bisman (2010), is post-positivism. Reality is considered an externality which exists

independently of human thought and perception. The assumption of the post-positivist is that the external world can accurately be described and casually explained. The author's description of post-positivism from a methodological perspective is its requirements for universal principles and generalizability imply the use of quantitative methodology, and the precision and usefulness of theories derived in this manner consequently are judged by their capacity to explain and/or predict phenomena. The author writes post-positivism, in its purest form, suggests that human behaviors can be reduced to little significance lending more to scientific, structured, theoretical, cause and effects, and statistical validation to confirm the theories. Mertens (2015) suggested post-positivism focuses on the respect for privacy, justice, and equal opportunities. Objectivity is important, according to the author; the researcher manipulates and observes in a dispassionate, impartial manner. The underlying assumptions of positivism include the belief that the social world can be studied in the same way as the natural world, that there is a method for studying the social world that is value-free, and that explanations of a causal nature can be provided.

Positivism. Aliyu et al. (2014) defined positivism as self-governing, independent, and objective existence of truth since it is a research paradigm established on the ontological principle and doctrine that truth and reality is free and independent of the viewer and observer. Additionally, defining positivism as real but apprehensible, utilizing quantitative methodology in research. The author suggests a fundamental predicament of positivist paradigm is that it cannot recognize the framing paradigm it has fashioned. The positivism paradigm puzzles the given universe with the world perception it has created to shape the given worldview. The paradigm cannot perceive that the position, on which it stands to structure its globe, is its own conception. Positivism, therefore, tends towards bigheadedness, prejudice, and the repression of scientism. According to Corry et al. (2019), post-positivism has superseded positivism as the guiding

paradigm of the scientific method. The incorporation in randomized controlled trials of post-positivist assumptions indicates that even on the methodological territory that it once claimed as its own, positivism has been rendered redundant as an appropriate for contemporary research. The authors question the continued viability of positivism and if this paradigm has the same level of influence as other paradigms.

Pragmatism. Pragmatism, as a worldview, arises out of actions, situations, and consequences rather than antecedent conditions, which is the view of post-positivism (Creswell, 2014). Inquirers of the pragmatism worldview draw liberally from both quantitative and qualitative assumptions when they engage in their research. Pragmatists do not see the world as an absolute unity; therefore, using various approaches for collecting and analyzing data. Paradigm categorization has a restrictive nature and methodological labeling approach that result from rigid interpretations and stifles growth in the research. Pragmatism is a philosophical tradition that promotes the development of theory. This is done directly from the practice of theory extraction as a result of actions and applied back to practice in an iterative process. Pragmatism is concerned with levels of truth, validity, correctness, and trustworthiness that help determine how knowledge is created and judged (Christ, 2013).

Constructivism. A constructivism worldview, according to Christ (2013), explains that the observer or researcher constructs or forms the reality or truth. In the paradigm of constructivist, each person's reality is different and there are no absolute truths. Researcher and participants recognize biases and negotiate their shared interpretations and their views about the value of the research process. Chandra and Shang (2017) suggested qualitative methods as a means to interpret, explore, and discover the constructs, theories, and frameworks via tools, such as interviews because it allows for flexibility in the research. Constructivism is different from

positivism, which focuses on theory/construct validation, refinement, or disconfirmation, typically involving one or more dependent variables and using multiple cases. On the other hand, the constructivist approach focuses on the discovery of new concepts, mechanisms, or processes and as a result developing a theory.

Constructivism is the chosen paradigm for this study because constructivism aims to understand the social world of those being studied and requires the interpretation of that world from the points-of-view of those residing within (Bogna et al., 2020). The qualitative research approach, according to Creswell (2014), is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The desired outcome was recognition for the need of leadership to take the initiative to ensure the relationships are formed among the virtual team members. The worldview paradigm for this research study is constructivism. According to Telej and Gamble (2019), this philosophy sees realities as individual constructs, this suggests that convincing the target audience to express their personal opinions carries great significance in addressing the research aim of the study. Through interviews and discussions with participants, the researcher was able to see the reality of how team leaders are ensuring opportunities for relationship-building. The researcher focused on the experience of each participant in a leadership position who either has or has not aided in relationship-building among the team members. This approach was used to conclude if leadership is playing a pivotal role in relationship-building and the impact on organizational success. The use of interviews and questionnaires that lead to the discussion of experiences of the participants helped to conclude if leadership is taking the responsibility to aid in relationship-building among the members of their perspective teams.

Discussion of Design

This section addresses three research designs, including flexible, fixed, and mixed methods. Flexible design, as discussed by Butina et al. (2015), is used when qualitative research is the focus of the research. A flexible design supports the characteristics that are specific to qualitative research, such as understanding people's experiences. The outcome is intended to be emergent or to convey these experiences into meaning. Conversely, a fixed design includes more structure and supports the characteristics of quantitative research. In quantitative (fixed) research, theories are tested, and numerical data analyzed through statistics. A mixed methods design is a combination of both qualitative and quantitative approaches, which provides for a comprehensive understanding of the research. There are three research designs, including (a) flexible, (b) fixed, and (c) mixed methods, which are discussed below.

Flexible Design. The flexible design method relies primarily on human perception and understanding (Stake, 2010). Special characteristics of the qualitative flexible design method are interpretive, experiential, situational, and personalistic. The author further describes the method as interpretive, because it focuses on the meanings of human experiences as seen from different views and experiential because of the emphasis placed on observations by participants and what they see rather than what they feel. The author explains the personalistic characteristics as working to understand individual perceptions and seeking uniqueness and diversity in the experiences. Creswell (2014) described qualitative methodology as an approach that allows the researcher to ask specific questions and to create a theory of the situation. Identifying a flexible design method as situational because each place and time has uniqueness, and it is holistic and not analytic. With the flexible design, the researcher is seeking to learn about the experiences by

asking open-ended questions; thereby, using a qualitative approach (Butina et al., 2015). This study will be conducted with a flexible design and will be discussed in detail below.

Fixed Design. The fixed design method is used to test objective theories by examining the relationship among variables and measuring these variables to produce numerical data that is analyzed statistically (Butina et al., 2015). Creswell (2014) suggested these variables can be measured, typically on instruments, and the numbered data can be analyzed using statistical procedures. Fixed qualitative research, according to Yue and Xu (2019), focused on the “what is?” rather than the “what should be?” This means the fixed method characteristics are factual based instead of focusing on ideals. Quantitative research is conducted in a structured environment that allows the researcher to have control over study variables, environment, and research questions (Rutberg & Bouikidis, 2018). A fixed design approach was not chosen for the study because the fixed method consists of set variables to be tested and measured, which does not adequately apply with this research (Creswell, 2014).

Mixed Methods Design. Mixed methods research design is when both quantitative and qualitative methodology are used in a single study (Rutberg & Bouikidis, 2018). This approach has the potential to allow the researcher to collect two sets of data: the numeric data and the experience or perception of the participant. Mixed methods research uses the combined results of this data to make a conclusion about the research questions. Creswell (2014) suggested this form of inquiry provides a more complete understanding of a research problem and neutralizes the biases and weaknesses that exist when the approaches are used alone. A mixed methods approach was not chosen for the study because, according to Creswell (2014), mixed methods integrate the two forms of data using distinct designs that may involve philosophical assumptions

and theoretical frameworks. The benefit of using this approach is the ability for a complete comprehension of the research problem.

Flexible Methods Design. This study was conducted with a flexible design using a qualitative research method; specifically, a multiple case study design was used. Graca and Passos (2015) suggested this is a powerful alternative to quantitative fixed design due to its advantages regarding sensitivity to context and its contribution toward elucidating team leadership's complex nature. Rutberg and Bouikidis (2018) suggested that qualitative research is flexible and provides a holistic perspective on the topic. Butina et al. (2015) described qualitative research study characteristics as a design that is often emergent and flexible, data are often collected in the natural setting, multiple forms of data may be collected, and sample selection is usually purposeful and small. This flexible methodology evaluates non-numerical data. Mohajan (2018) described qualitative research as a form of social action that stresses how people interpret and make sense of their experiences to understand individuals' social reality. This flexible method was most appropriate for the research because the focus was on the experiences of leadership aiding in relationship building among the virtual team members. The researcher sought to understand the tools used to aid in relationship building when the team members are not located in the same edifice and if these tools have some impact on the experienced organizational successes.

Discussion of Method

The three research methods, consisting of (a) qualitative, (b) quantitative, and (c) mixed methods, had a significant purpose in the process of developing substantial explorations. This section will address each of these methods and display details that are unique to each approach. This study was conducted using a qualitative, flexible, methodology, with a multiple case study

design. Additionally, there are five common methods associated with flexible design research, to include (a) narrative, (b) phenomenology, (c) grounded theory, (d) ethnography, and (e) case study that is discussed below.

Qualitative Method. Creswell (2014) described qualitative methodology as an approach that allows the researcher to ask specific questions and to create a theory of the situation. Typically based on social science research pertaining to relationships, experiences, and perceptions formulate the basis of qualitative research. Rutberg and Bouikidis (2018) suggested qualitative research methodology is often employed when the problem is not well understood and there is an existing desire to explore the problem thoroughly. Qualitative research, as described by Polit and Beck (2012), examines phenomena using an in-depth, holistic approach and a fluid research design that produces rich, telling narratives. Qualitative research can help researchers access the thoughts and feelings of research participants, which enable the development of an understanding of the meaning that people ascribe to their experiences (Sutton & Austin, 2015). The authors continue by suggesting qualitative work requires reflection on the part of research both before and during the research process, as a way of providing context and understanding for readers. The researcher is a research tool and data are constantly being analyzed to identify commence of the study (Rutberg & Bouikidis, 2018).

Quantitative Method. Unlike the flexible method, the fixed, quantitative approach is based on numerical data collection to investigate theories. Quantitative research uses a rigorous and controlled design to examine phenomena using precise measurement (Polit & Beck, 2012). Butina et al. (2015) described this method as a research approach used for testing objective theories by examining the relationship among variables and measuring these variables to produce numerical data that is analyzed statistically. Quantitative research methods can be used to

determine how many people undertake particular behaviors (Sutton & Austin, 2015). Often viewed as a rigid form of research, the quantitative approach displays a more formal process than the qualitative method. The quantitative approach is systematic, narrowly focused, hypothesis based, cause-and-effect method. The data are measured and defined in this method using statistical instruments for analysis. Quantitative research is conducted in a more structured environment that often allows the researcher to have control over study variables, environment, and research questions (Rutberg & Bouikidis, 2018).

Mixed Methods. Combining the two methods in research, fixed and flexible, is known as the mixed-methods approach. This hybrid approach involves collecting data for both qualitative study and quantitative analysis. According to Creswell (2014), this method integrates the two forms of data using distinct designs that may involve philosophical assumptions and theoretical frameworks. The benefit of using this approach is the ability for a complete comprehension of the research problem. Polit and Beck (2012) described advantages of using a mixed method approach, including complementary, practicality, instrumentality, enhanced validity, and collaboration. Also, the authors reveal mixed methods to use words and numbers, removing the limitation of using just one method of data collection.

This study was conducted using a qualitative (flexible) methodology, with a case study design. Graca and Passos (2015) suggested this is a powerful alternative to quantitative design due to its advantages regarding sensitivity to context and its contributions toward elucidating team leadership's complex nature. According to Mohajan (2018), one of this method's strengths is that it emphasizes less on counting numbers of people who think or behave in specific ways and explains why people think and behave in certain ways. A qualitative (flexible) methodology was chosen over the others to give a holistic, interpretive view of the leader's approach in aiding

in developing relationships among team members that are divided by distance, time zones, and sometimes cultural differences. The goal of this research was to show how leadership's failure to implement an approach can have a negative impact on organizational accomplishments. The narrative analysis targeted virtual team leaders faced with developing teams with little or no prior interactions; therefore, there were no opportunities for previous relationships to be developed. Survey research allows for various methods to recruit participants, collect data, and utilize multiple instrumentation methods (Ponto, 2015).

Discussion of Flexible Method

The flexible method of qualitative research consists of five designs: (a) narrative, (b) phenomenology, (c) grounded theory, (d) ethnography, and (e) case study. According to Creswell (2014), these designs provide direction for procedures in the research. This section addressed the five flexible method designs and identifies the method used in this qualitative research study.

Narrative. Narrative research explores the life of an individual, addressing the problem by telling the stories of individual experiences (Creswell & Poth, 2016). There may be a collaborative feature of narrative research as the story emerges through the interaction or dialogue of the researcher and the participant. Narrative research can shed light on the identities of individuals and their self-perception. The information is gathered through many forms of data, mainly through interviews, but also through observations, documents, pictures, and other sources of qualitative data. Once collected and analyzed, the data are structured in a chronological manner. Paschen and Ison (2014) proposed that the narrative researcher elicits the stories using a conversational interview technique with open-ended questions; however, semi-structured interviews can also be sufficient. Narrative inquiry as a qualitative methodology, in the form of

semi-structured, narrative interviews considers all aspects of narrative: the story itself, how it relates the speaker's experience to his or her social context, and the joint construction of meaning between 'interviewer' and 'respondent' in the communicative situation. Narrative inquiry, then, studies the emergence of knowledge as part of social contexts and interactions. Narrative research was not the chosen design because this form of research is collaborative relations based on building and maintaining rapport and trust between the researcher and the participant (Abkhezr et al., 2020). Creswell and Poth (2016) pointed out that narrative research focuses on the same experience or phenomena encountered by a group of individuals.

Phenomenology. Creswell (2014) described phenomenology research as a design of inquiry coming from philosophy and psychology in which the researcher describes the lived experiences of individuals about a phenomenon as described by participants. Creswell and Poth (2016) pointed out that the difference between a narrative study and the phenomenological study is narrative research reports the stories of experiences of a single individual or several individuals, whereas a phenomenological study describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon. The researcher collects data from persons who have experienced the phenomenon and develops a composite description of the essence of the experience for all of the individuals. Theoretically, explained Flynn and Koruska (2018), phenomenological research is a subcategory of interpretivism, meaning that it strives to understand and explain human reality. Researchers using phenomenological research methodology endeavor to discern the essence of participants' lived experiences and to lay aside their prevailing understandings of a phenomenon authentically to explore the participants' experiences. The researcher ends the phenomenology approach with a descriptive passage that addresses the essence of the experience for individuals incorporating "what" they have

experienced and “how” they experienced it. Expressing the “essence” is the culminating aspect of a phenomenological study (Creswell & Poth, 2016). Phenomenology was not the chosen design because it focuses on describing what all participants have in common, as they experience a phenomenon (Creswell & Poth, 2016).

Grounded Theory. Grounded theory, unlike the previous design approaches, does not concentrate on the experiences of individuals or groups of individuals, its goal is to generate or discover a theory (Creswell & Poth, 2016). Starks and Trinidad (2007) suggested that grounded theory relies on theoretical sampling which involves recruiting participants with differing experiences of the phenomenon to explore multiple dimensions of the social processes under study. With this qualitative design, the inquirer generates a general explanation or theory of a process, an action, or an interaction shaped by the views of many participants (Creswell & Poth, 2016). Konecki (2018) explained that theory is philosophically neutral in grounded theory research, meaning existing literature of lack of is not the basis of the theory. This does not indicate ignoring literature, but the researcher should wait until the main concern or core category emerges from the interviews and discussions before the literature review begins. This prevents the main challenge of considering preconceived concepts and treats the existing literature as data for coding rather than a reservoir of concepts utilized in research and analysis. Grounded theory was not the chosen design as this approach. Grounded theory would have been the best approach if the focus were to develop a theory based on the common experiences for several individuals (Creswell & Poth, 2016).

Ethnography. Ethnography originated from anthropology and sociology in which the researcher studies the shared patterns of behaviors, language, and actions of an intact cultural group in a natural setting (Creswell, 2014). Ethnography involves extended observations of the

group, most often through participant observation, in which the researcher is immersed in the day-to-day lives of the people and observes and interviews the group participants (Creswell & Poth, 2016). Immersion often means the ethnographers becomes implicated in the lives of research respondents and wrestles with choices about positionality, identity, and the nature of the relationships. When researchers spend any time in a research site, they find themselves deliberately and/or unconsciously reacting to respondents' actions and comments as they negotiate expectations about this relationship, try to gain access to the sit and to people, determine what data can be collected and how, which voices will be heard in the research account, and what happens after the study (Cunliffe & Karunanayake, 2013). Creswell and Poth (2016) suggested when the ethnographic research data is analyzed, the researcher relies on the participants' views as an insider emic perspective and reports them in verbatim quotes and then synthesizes the data filtering it through the researchers' etic scientific perspective to develop an overall cultural interpretation. Ethnography was not the chosen design as this approach would be better suited if the focus was to identify how the culture of the virtual team works (Creswell & Poth, 2016).

Case Study. Case study is the preferred research approach when the situations are (a) the main research questions are “how” and “why” questions, (b) a researcher has little to no control over behavioral events, and (c) the focus of study is a contemporary phenomenon as opposed to historical. This form of research exists to fulfill the desire to understand complex social phenomena. Case study allows investigators to focus on a “case” and retain a holistic and real-world perspective (Yin, 2014). Dresch et al. (2015) suggested that case study is a method that, when properly carried out, provides an understanding of certain phenomena in-depth and is a common method used for empirical studies. The objective of case study research, as suggested

by the authors, is to explore, describe, explain, and predict phenomena or existing systems. The case study approach must always address the research question(s) to increase the chances of handling the proposed issue. Data collection should entail multiple sources of evidence such as interviews, document analysis, location visits, and others. According to Creswell and Poth (2016), case study research often ends with conclusions formed by the researcher about the overall meaning or general lessons gained from the cases.

The case study design was used in this qualitative study. This design utilized multiple sources to conduct the research, including (a) questionnaires, (b) observations, (c) interviews, and (d) other forms that will allow the researcher opportunity to evaluate or receive feedback that reveals personal experiences (Dresch et al., 2015). Data were gathered through questionnaires or surveys and interviews. Survey research allows for various methods to recruit participants, collect data, and utilize multiple instrumentation methods (Ponto, 2015). The case study allowed the researcher to answer the “what” and “how” of practices that leaders should use to foster the development of relationships among the virtual team members. Therefore, the researcher identified case study as the appropriate design for this research.

Discussion of Triangulation

Triangulation, according to Carter et al. (2014), is a qualitative research strategy to test validity through the convergence of information from different sources. Frequently used in qualitative studies is method triangulation, which may include interviews, observation, and field notes. There are four types of triangulation: (a) method triangulation, (b) investigator triangulation, (c) theory triangulation, and (d) source triangulation.

Method Triangulation. The first type triangulation is method triangulation which uses multiple methods to collect data including interviews, observation, and field notes. Fusch et al.

(2018) described method triangulation as one that can triangulate data from multiple collection methods, such as interviews, focus groups, or observations. Method triangulation includes multiple sources of data found within one design, such as in a qualitative case study, data are triangulated from multiple data collection methods, including interviews, focus groups, and observations. The advantage of method triangulation is it has the potential to improve data quality and inferences drawn by validating substantive findings across a diverse set of methods (Nielsen et al., 2020). The authors continue by suggesting it also expands the scope of inquiry by allowing for a greater range of research questions to be addressed and a more holistic understanding of the phenomenon obtained. Moon (2019) suggested that method triangulation provides a more complete picture than just using one method.

Investigator Triangulation. Investigator triangulation is the participation of two or more researchers in the same study to provide multiple observations and conclusions (Fusch et al., 2018). Kabadayi and Tsiotsou (2022) suggested it is ideal if researchers from various subfields and/or disciplines can be utilized. This approach is best for mitigating and controlling individual biases because it includes investigators observing the same data, but they may not agree on its interpretation (Moon, 2019). Investigator triangulation should also include member checking, for example, informants are invited to review the summary of the analysis provided by researcher and to offer comments which should be reintroduced in the analytical process enhancing the overall credibility of the analysis (Decrop, 1999). Archibald (2016) suggested investigator triangulation, sometimes referred to as researcher triangulation, is a collaborative strategy for mixed method research (MMR) mitigating exclusive reliance on having a single investigator and promotes a spirit of its diverse characteristics.

Theory Triangulation. Theory triangulation, the third type, uses different and alternative theories to analyze and interpret data (Fusch et al., 2018). In this case, the data is viewed through a theoretical lens and through contradictory theories. Also, the raw data speaks to the researcher to ascertain a new theory. Moon (2019) suggested theory triangulation uses more than one theory to help guide the research design, research study implementation, and interpretation of data. Kabadayi and Tsiotsou (2022) suggested this as a benefit of theoretical triangulation because no single theory can have a monopoly on explanation.

Source Triangulation. The fourth is data source triangulation (Carter et al., 2014). This involves a collection of data from different types of people to gain multiple perspectives and validation of data. Frequently confused with method triangulation; however, it can be differentiated by referring to three interrelated data points: people, time, and space. Each data point represents different data of the same event showing commonalities with dissimilar settings. Moon (2019) suggested that the differentiation between source triangulation and methods triangulation is that source triangulation focuses more on obtaining data from multiple sources within a single data collection method to ensure that a more complete perspective is obtained.

The two forms of triangulation used for this research were method and data source triangulation. The source of the information for this research were the interview and interaction process with the study participants. Carter et al. (2014) referred to this as in-depth individual interviews (IDI). Most qualitative researchers studying human phenomena collect data through interviews with individuals or groups. Researchers need a considerable amount of time to perform the interviews, analyze, and translate the interviews. The focus was to validate the information from the participants, while examining similarities within the targeted group of participants. Yin (2018) suggested that triangulating measures from different sources strengthens

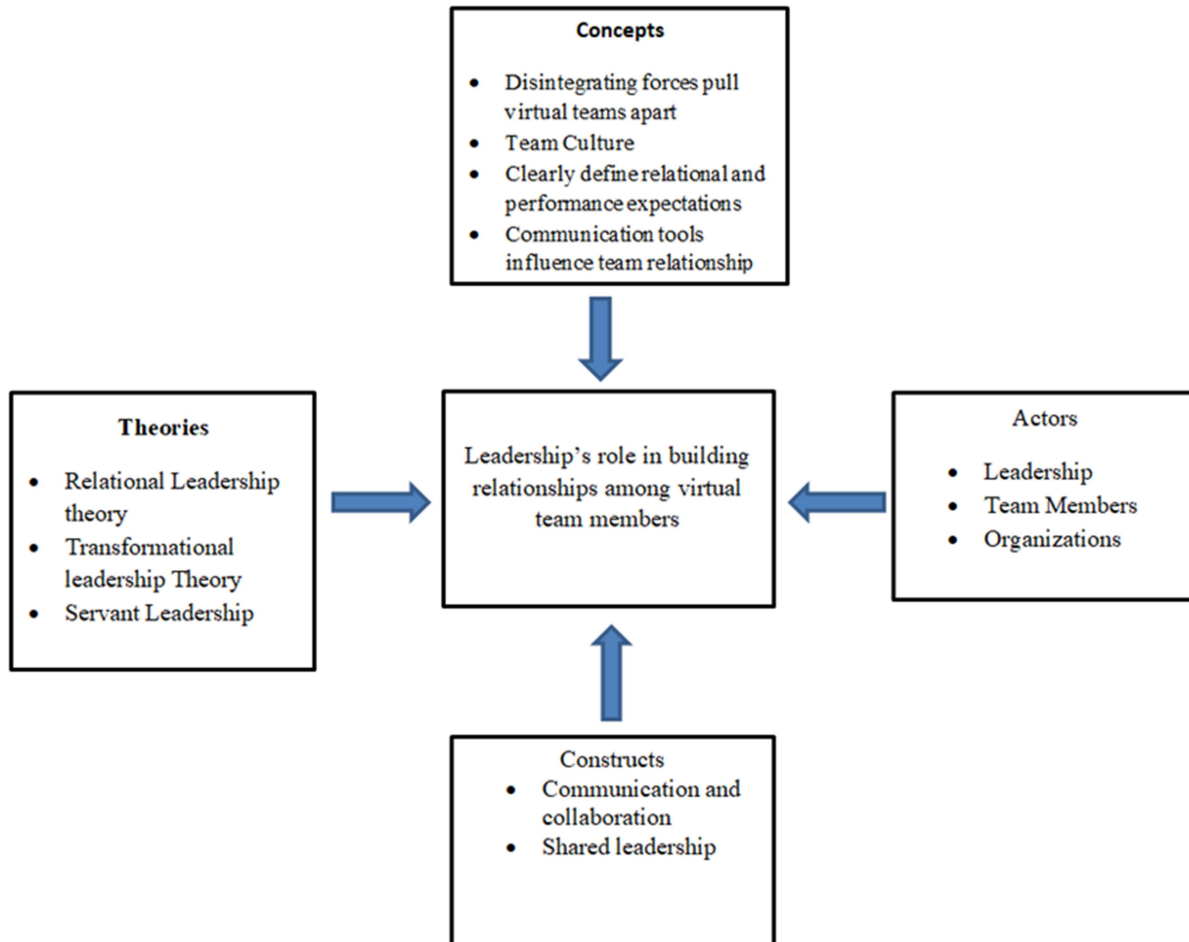
the validity of a study through countering bias that may arise from single measures and so contributes to establishing 'facts.'

Summary of the Nature of the Study

This section focused on the nature of study. The research paradigms were identified and discussed. The author revealed constructivism as the selected paradigm as the most appropriate paradigm for the topic of research. The research designs, including fixed, flexible, and mixed method were discussed. Selection of the appropriate design and an explanation of why it was chosen was the next focus of this section. The final focus of this section was triangulation and how it was utilized in this research. The chosen research design for this qualitative research study was flexible and the method triangulation approach was used to gather data.

Conceptual Framework

The information in this section provides the research framework to view various concepts, theories, actors, and constructs to support the research. Figure 1 below shows an overview of these concepts, theories, actors, and constructs that support this research. Jabareen (2009) defined conceptual framework as a network or a "plan" of linked concepts that together provide a comprehensive understanding of a phenomenon or phenomena. The author continues by noting the advantages of conceptual framework analysis are its flexibility, its capacity for modification, and its emphasis on understanding instead of prediction. The concepts support one another, articulate their respective phenomena, and establish a framework-specific philosophy. Imenda (2014) suggested the conceptual framework is the soul of every research project. The author suggested it determines how a given researcher formulates his/her research problem, how the problem will be investigated, and what meaning is attached to the data accrued from the investigation.

Figure 1*Research Framework Diagram.***Concepts**

A growing number of managers find themselves leading teams with members located literally around the world. Like any team, a virtual team works on interdependent tasks guided by a common purpose (Kerber & Buono, 2004). When conducting research pertaining to building relationships among virtual team members, there were a few concepts considered. One concept was the presence of disintegrating forces that pulls virtual teams apart making it more difficult to form relationships. Another concept was the team culture, when orchestrated by

leadership communication tools and techniques will enhance team trust and relationship-building (Newman et al., 2020a). The concepts are further evaluated and discussed in this section.

Disintegrating Forces Pull Virtual Teams Apart. One concept is the disintegrating forces, such as time zone differences, cultural diversity, and a general lack of face-to-face contact and interaction that pull teams apart (Kerber & Buono, 2004) preventing the development of relationships among virtual team members. The authors continue by suggesting that virtual team leaders must overcome these forces on an ongoing basis. Kligler (2017) advised building the level of trust that is essential to a high-functioning team can be difficult without face-to-face time together. Also adding that all of the subtle communication signals that are relied on to reach each other's emotions include facial expressions and body language, which are not available the way they are in a shared office setting. In this research, the leaders of the virtual teams were asked to discuss what tools and approaches are used to overcome the challenge of lack of face-to-face interaction. The leaders did not reveal any new tools and techniques, but most emphasized both the importance of face-to-face meetings and the tools used allowing communication to happen among the team members. The importance of regular face-to-face meetings cannot be overstated especially from the view point of relationship-based, mindful leadership (Kligler, 2017). The author emphasizes this by adding even a one-day meeting can move a team forward dramatically in terms of trust and collaboration in a way which may support more effective virtual work.

Time Zone Differences. When members are located in different time zones, their waking hours and workdays are offset relative to each other (Espinosa & Carmel, 2003). Mell et al. (2021) defined the dispersion of team members across multiple time zones as temporal dispersion. Temporal dispersion, as suggested by the authors, is a critical challenge that global teams face

because the waking and working hours of team members may not overlap and hence give limited opportunities for synchronous interactions. The leader must create networking and communication opportunities or create the concept of temporal brokerage (Mell et al., 2021). The authors define temporal brokerage as being in a position of bridging subgroups that have little or no temporal overlap with each other. The interview participants with team members were distributed across multiple time zones, revealed the challenges involved with ensuring all team members remained included and informed.

Cultural Diversity. Another disintegrating force, cultural diversity, is widely believed to broaden the knowledge and perspectives in a team and hence benefit team creativity (Leung & Wang, 2015). According to Shin and Zhou (2007), cultural diversity lowers group cohesiveness because of intercultural problems such as mistrust but creates opportunities for new and useful ideas. Although the number of global virtual teams has been growing rapidly, it is still a great challenge to achieve internal collaboration across geographic, cultural, and linguistic barriers (Lauring & Jonasson, 2018). Dispersed work groups in which members are located in different countries face unique cultural differences that can affect the overall success of the group's performance. The discussions with many of the research participants lead to the topic of how cultural diversity was handled. The research participants were eager to discuss the importance of understanding cultural diversity and how it played a big part in developing relationships among the team members. Some of the participants shared that they made a conscious effort to ensure cultural behaviors were shared and discussed among the team members. This discussion could range from discussing how the cultures celebrated certain holidays, to the importance of education and what the process of getting an education past high school looked like in each culture. Also discussing topics like sports, weather, even the topic of family dynamics have been

discussed among the team members. It became apparent in the interview process that many of these discussions were initiated during team calls using video conferencing and through face-to-face interaction. Cultural expectations and understandings can have a profound impact on the group's overall performance, and in many cases present unique challenges to building effective interpersonal relationships between remote team members (Daim et al., 2012).

Face to Face Contact and Interaction. An increasing number of employees are members of virtual teams, as more than 60% of multi-national organizations use virtual teams and the number will likely continue to grow in the future (Gibson et al., 2015). The importance of team empowerment is discussed by Kirkman et al. (2004). In their writings, the authors discuss leadership's impact on empowering the virtual team and how the lack of face-to-face interaction can prevent the existence of team and individual empowerment. Further suggesting the strength of the team relationship between team empowerment and virtual team performance may depend on the degree to which team members experience face-to-face interaction. The importance of face-to-face interaction was a key theme in this research. The majority of the research participants recognized this and either have created opportunities for face-to-face contact or are working to create an opportunity. The importance of leadership creating opportunities for virtual members to meet face-to-face is also discussed by Cohen and Gibson (2003). The authors suggest teams with few opportunities to meet face-to-face are highly vulnerable to process losses and performance problems.

Team Culture. Another concept to discuss and evaluate was team culture and the impact on leading a virtual team. A team culture defined and nurtured by leadership enhances team collaboration and performance (Ruygrok, 2016). The author describes team culture as a set of norms, values, and beliefs that drive behavior and performance. Ruygrok (2016) continued by

suggesting it is imperative for leaders to develop a cohesive, high performing culture for sustained daily performance. Cagiltay et al. (2015) suggested that team performance can be directly (or indirectly) affected by the cultural contexts that they bring. A healthy culture can also foster collaboration, as revealed in studies performed by Haworth's (2016) research which can help to build relationships among a team comprised of members who are not located in the same office. For the leader to nurture a culture that helps to develop cohesive relationships, he/she must clearly identify the expectations, both relational and performance (Ruygrok, 2016).

Clearly Define Relational and Performance Expectations. The challenge leaders of virtual teams' face are creating a level of collaboration and productivity (Kerber & Buono, 2004). The authors suggest that leadership should focus less on becoming a high performing team and more on achieving key performance objectives. Also adding that the leader must communicate clearly to all members that the team must find ways to add significant value to the business and be recognized as key contributors to the overall business performance. Furst et al. (2004) suggested drafting mission statements, goal setting, and coordination of work help in defining performance expectations, while team-building exercises help to create a team identity and strengthen interpersonal relationships. Clear direction and goals enhance self-regulation and enable team members to monitor their own performance (Bell & Kozlowski, 2002). According to Ruygrok (2016), culture trumps everything in determining how teams behave. Culture exists regardless of the leader nurturing and developing it or leaving it to develop on its own. Virtual team leaders need to motivate team members to commit strongly to the overall team effort and facilitate team coherence (Bell & Kozlowski, 2002).

Communication Tools Influence Leadership Relationship Building. During the formation of a new team or addition of a member to an existing team, the members should

develop trusting intra-team relationships based on collaboratively negotiated communication protocols (Zakaria et al., 2004). Leadership has been found to be universally important across different countries, companies, and team structures in its influence on worker motivation, organizational innovation, and team performance (Antonakis & House, 2014). Leadership communication tools and techniques, especially in virtual teams, play an important role in team-trust and relationship-building (Newman et al., 2020b). Furthermore, the authors suggest that virtual team members perception of their leader's effective use of communication tools and techniques affect team performance and outcomes. The effectiveness of a leader's communication with a team is important for multiple reasons (a) provides clear direction for teams as it works toward organizational goals and expectations, and (b) teaches a corporate culture which fosters coordination and collaboration among team members (Newman et al., 2020). The research performed supported the need for sufficient tools for communication. The leaders need to ensure the correct tools are available for the team members to be able to contact, and be contacted, with ease and no frustrations. Communication challenges unique to virtual teams can lead to lower levels of group cohesion, diminished employee engagement, and a reduction in cooperation among virtual team members (Hoch & Kozlowski, 2014).

Theories

The task of leadership's role of aiding in development of relationships among virtual team members must consider theories. Relational leadership theory, transformational leadership theory and servant leadership theory are examples applicable to this study. These theories are described further in this section including subcategories of each theory.

Relational Leadership Theory. Relational leadership theory consists of two perspectives, entity, and relational perspective (Uhl-Bien, 2006). The entity perspective focuses

on identifying attributes of individuals as they engage in interpersonal relationships and a relational perspective views leadership as a process of social construction through which certain understandings of leadership come about and are given privileged ontology. Smit (2018) suggested relational leadership also involves relational integrity and responsibility. Further describing this sense of responsibility, to be responsive, responsible, and accountable to others in everyday interactions proposes a moral stance of caring relationships and moral responsibility. This theory supports the basis foundation for this study, and understanding that each team member, including leadership has responsibility when trying to build relationships among virtual team members. Relational leadership draws on an intersubjective view of the world to offer a way of thinking about who leaders are in-relation to others and how they might work with others within the complexity of experience (Cunliffe & Eriksen, 2011). Both the entity and relational perspectives makes it possible to understand the different relational aspects for leadership, which is discussed in this section.

Entity Perspective. The first point of discussion is the entity perspective, which focuses on individual entities and the behavior of leadership in relationships (Ruppert-Winkel, 2018). The social process, according to the author, is enabled and influenced by interacting individuals. This perspective assumes that: individuals have a “knowing mind,” (p. 655) individuals have access to the contents of their mind, and these entities can be distinguished from other entities (i.e., people) and the environment (Uhl-Bien, 2006). Group interaction is shaped by individuals and their attributes, personal characteristics, and skills in their interpersonal relationships (Ruppert-Winkel, 2018). The entity perspective considers the social relationship between leaders and followers and the role this relationship plays in organizational success (Uhl-Bien, 2006). All the themes that emerged in this research have some relation to the entity perspective.

Collaboration, communication, and face-to-face interaction, when fostered by leadership, are key in building cohesive relationships among team members. Leadership is viewed as an influence that individuals align with one another to accomplish mutual organizational goals.

Relational Perspective. There are countless organizational lessons observed from a relational perspective, according to Chen and Miller (2011). The authors suggest that organizations are viewed as social systems with consideration of the needs of individuals and groups. Relational perspective demonstrates an ambicultural mode of management or one that builds on the best managerial practice of all associated cultures, which is useful in today's global economy (Chen & Miller, 2011). This perspective, the authors continue, put a premium on the reputation, trustworthiness, and social appropriateness of a leader. Uhl-Bien (2006) described the perspective as one that assumes that social reality lies in the context of relationships and does not focus on discrete, abstracted phenomena. Cunliffe and Eriksen (2011) noted the value of a relational perspective is that it not only offers a way of re-conceptualizing relationships between leaders, organizational members, and other stakeholders as an ongoing intersubjective shaping of social circumstances and surroundings, but also offers practical theories for creating collaborative relationships. One of the important leadership skills is relational management, which allows for a workable balance of cohesion, unity, and task motivation in the group (Pauleen, 2004).

Transformational Leadership Theory. Transformational leadership theory was designed to explain variances in leadership effectiveness (Siangchokyoo et al., 2020). The authors continue by suggesting that transformational leaders influence the development and transformation of their followers by enhancing follower's performance as well as organizational performance. Observed during the research interview process, it is important for leadership to

ensure the team members have the proper tools and opportunities to the team member so relationships can form. Once the trust is built, collaboration can start and relationships can develop and grow. Transformational leadership is described by Bush (2018) as a powerful influence process where leaders persuade followers to adopt certain behaviors. A study by Purvanova and Bono (2009) found that transformational leadership has a stronger effect on team performance in virtual than in face-to-face teams. The research performed by Purvanova and Bono (2009) further suggested that transformational leadership behaviors are especially instrumental to team performance under the more ambiguous communication conditions created by electronic communication media. Siangchokyoo et al. (2020) suggested the extent that leaders are considered transformational is a function of four leader dimensions: (a) idealized influence, (b) inspirational motivation, (c) intellectual stimulation, and (d) individualized consideration. A key indicator of the effectiveness of transformational leadership would be evidence that the transformation of followers represents the process through which transformational leaders influence positive individual, group, and organizational outcomes.

Idealized Influence. One of the behavioral dimensions of transformational leadership, idealized influence involves charismatic role modeling where the leader demonstrates his or her determination to achieve organizational goals serving as a personal example for followers (Afshari, 2021). The author points out that transformational leaders influence and inspire their employees to pursue the organization's vision through empowering and inspiring relationships. Also stating that in idealized influence leaders gain their employees' respect, trust and admiration by articulating the organizational goals and demonstrating their determination to achieve the goals. In their research, Zdaniuk and Bobocel (2015) revealed leaders who display idealized influence leadership promote employees' general cooperation and decrease employees' general

antisocial behaviors. Loon et al. (2012) also described transformational leaders, under idealized influence behavior, are goal-oriented, and they encourage the completion of work based on a collective sense of beliefs, values, purpose and mission. Agyemang et al. (2017) concluded in their research that idealized influence has a positive and significant impact on knowledge sharing. The authors reveal that employees' decision to share knowledge among the team is a result of the idealized influence provided by the leadership who instills confidence, dignity, and integrity in employees thereby building a knowledge sharing culture in an organization.

Inspirational Motivation Leadership. Dionne et al. (2004) suggested that inspirational motivation leadership can support virtual teamwork outcomes by creating shared goals and thus facilitate a sense of direction. Transformational leaders practicing inspirational motivation are optimistic, visionary, and passionate about the work to be performed according to Loon et al. (2012). Purvanova and Bono (2009) argued that this type of leadership behavior strengthens the use of communication to motivate team members to reach a common goal. This is very important in virtual teams where interaction is less natural due to the dependence on technology-mediated communication often leaving team members feeling distant and anonymous (Lauring & Jonasson, 2018). Inspirational motivation leadership may be particularly useful in virtual teams given the difficulty of developing a collective sense of direction and cohesiveness at a distance. Inspirational motivation is the leaders' ability to formulate and express vision that work teams or the entire organization can identify with from both the commercial and personal perspectives (Loon et al., 2012). The authors continue by suggesting this vision is operationalized at the individual level, and the process takes into consideration the capabilities of the individuals by considering the manner in which they contribute to the vision and simultaneously fulfill their personal ambitions.

Intellectual Stimulation. Another component of transformational leadership, intellectual stimulation will be discussed in this section. Intellectual stimulation encompasses leadership behaviours that increase followers' interest in and awareness of problems, constitutes a social cue to encourage employees to explore new methods, and nurture employees' growth in the workplace (Rafferty & Griffin, 2004; Zhou et al., 2012). Leader intellectual stimulation promotes feelings of work meaningfulness among the employees at different organizational levels (Peng et al., 2016). Further suggesting that stronger relationships are observed with the presence of intellectual stimulation. While this leadership factor has not been the subject of extensive research, this construct encompasses a more focused, and internally consistent set of behaviors than the other subdimensions of transformational leadership (Rafferty & Griffin, 2004).

Individualized Consideration. Changes in the nature of employment conditions have not only required additional skill development by employees, but also required leaders to equip their staff with the skills to succeed in the new environment, requiring individualized consideration leadership (Rafferty & Griffin, 2006). Cho and Dansereau (2010) suggested individualized consideration relates to leader-directed organizational citizenship behaviors through interpersonal justice. Also adding that it is based on the theoretical notion that leaders focus on concerns for each individual follower. As the concept implies, it is highly likely that a leader's support will vary among different followers depending on their differing capabilities and needs (Cho & Dansereau, 2010). Individualized consideration leadership aims to attend to followers' emotional needs, to act as a support, and to listen to followers' concerns (Piccolo & Colquitt, 2006). Rafferty and Griffin (2006) suggested individualized attention allows leaders to become familiar with followers, enhances communication, and improves information exchange.

Servant Leadership Theory. Heyler and Martin (2018) gave credit to the late Robert Greenleaf (1977) for defining servant leadership theory as the leadership style which the leader is first a servant, then focuses on others and their development. The authors continue to identify this form of leadership as the potential to effectively utilize the organizational level of analysis. Hoch et al. (2016) suggested servant leadership posits that by first facilitating the development and well-being of followers, long-term organizational goals will be achieved.

Heyler and Martin (2018) suggested the characteristics differentiate servant leadership from other leadership theories. When compared to transformational leadership, for example servant leadership is the desire to serve and prepare others for growth and to serve as well; where transformational leadership emphasizes a desire to lead and inspire followers to perform well. Andersen (2018) described the difference between the two theories as servant leaders focus on their followers' well-being, while transformational leaders tend to focus more on organizational goals. The largest difference between these two leadership theories is the servant leadership focuses on humility, authenticity, and interpersonal acceptance, none of which are an explicit element of transformational leadership (Van Dierendonck, 2011). Many leaders who participated in this research displayed servant leadership. The leaders often spoke of setting the foundation for the team members to excel and perform as a unit which included giving the virtual team members the proper tools and opportunities to form strong cohesive relationships.

Actors

This research is dependent on the participation of several actors. The actors included in this research include: the person fulfilling the leadership role and performance of team members who are directed by the leader. Equally important is the type of organization these actors represent. These three actors are discussed in this section. According to Curry (2014), leadership

is an essential component for team effectiveness; therefore, a key figure in this research. An important task for team leadership is the establishment of a culture within the organization and within the team that supports collaborative decision-making. Therefore, making team members another key participant of this research. The organizations which these team leaders and team members reside, will be key. In this section, organizations that are targeted as good candidates for this research are identified and discussed to understand the unique characteristics of each.

Leadership. Leadership is widely recognized as a key factor in team effectiveness. Virtual teams generally have leadership, but the leadership roles within these teams often take a different form from that of traditional teams (Eubanks et al., 2016). One of the important leadership skills is relational management which allows for a workable balance of cohesion, unity, and task motivation in the group (Pauleen, 2004). Leadership's ability to build relationships among team members helps the members to form cohesive connections that can enhance team excellence (Pauleen, 2004). According to The Hill Model of Team Leadership, as discussed by Northouse (2016), team excellence depends on two functions, team performance and team development. The leadership model shows that team performance is the accomplishment of the team. Team development is the cohesiveness of the group. Northouse (2016) concluded by suggesting that proper leadership will ensure the tasks get accomplished. The research supports this notion because the themes that emerged will not be possible without leadership making certain the team members have everything they need to have successful relationships with their virtual team members. Leadership is an essential component for team effectiveness; therefore, a key figure in this research (Curry, 2014).

Team Members. Equally key to the success of this study are the team members. Team members have specific and unique roles, where the performance of each member contributes to

the collective success of the team (Zaccaro et al., 2001). Purvanova (2013) revealed that in virtual teams, the members sometimes sense social uncertainty, experience deindividuation, feel isolated, and disconnected from fellow teammates. The author also reveals that team members may learn new skills and become more aware of personal strengths, and they may derive a sense of personal well-being and satisfaction from their team experience. Important to this research was the perception of the team members of how the leader has intentionally created opportunities for the team members to develop relationships within the team. When such central needs, as mentioned by Purvanova (2013), are not met, virtual team members are not likely to be fully and positively engaged with the team experience.

Organizations. Organizations continue to adopt virtual teams as a primary way to structure work (Dulebohn & Hoch, 2017). While virtual team structures show many advantages, the disadvantages include communication and collaboration difficulties, along with difficulties in creating trust and the presence of isolation with the high levels of social distance between members (Dulebohn & Hoch, 2017). This research evaluated the leader's role in ensuring relationships are built among team members for success of the organization. The focus of this research was organizations with presence in the Charlotte, NC region where the teams are virtually located from leadership and other team members. The organizations targeted in this research were companies that manufacture, supply, or distribute products considered medical devices. The participating organizations have locations in the Charlotte, NC metropolitan area, and have virtual teams within their operation. There were 20 organizations approached to participate in this study. These organizations have an affiliation with the medical industry, including the manufacturing, distribution, or supply of medical material and devices.

A medical device, as defined by Aronson et al. (2020) is a contrivance designed and manufactured for use in healthcare, and not solely medicinal or nutritional. Essity is a global health and hygiene company that focuses on patient well-being through their products and services. The organization is further described as a leading global player in personal care. And their offerings include incontinence products, baby care, feminine care, and medical solutions (www.Essity.com). Like Essity, Joerns Healthcare provides medical solutions. Joerns focus is on providing services and products to simplify post-acute care for patients in a nursing home, rehabilitation facility, final care facility, or in the patient's home (www.joerns.com). Other medical equipment manufacturers to be approached include Smith and Nephew Orthopedics, Baxter Healthcare, Dentsply Sirona, and Pattons Medical.

Medical devices are an important component in health service facilities (Anjani & Nizar, 2021). Finch Surgical is a medical device sales company, which is known for supplying a range of products from operating room supplies to specialty departments such as Cath Labs, interventional radiology, and emergency departments (www.finchsurgical.com). UA Medical Products is a medical device sales company too. Both companies distribute medical products manufactured by other medical companies. Representing various manufacturers, the distributor seeks ways to offer products that improve medical teams' patient care capabilities (www.uamedical.com). Also, McKesson Medical is a distributor of medical supplies, healthcare solutions, distribution services, and clinical resources (www.mms.mckesson.com). Distributors are sometimes the extension of manufacturers giving them the ability to reach a larger demographic of customers for utilization of the products (Anjani & Nizar, 2021).

Constructs

The constructs of this research reflected on the roles and responsibilities the leader has to the team and organization (Pauleen, 2004; Wakefield et al., 2008). Virtual leaders must be responsible for managing the project tasks and handling personality conflicts that may arise from cultural differences in the virtual teams. This section addresses the role leadership has to ensure collaboration and coordination among virtual team members to help build relationships. Also discussed was the importance of implementing shared leadership opportunities to ensure more cohesion and trust among the team members.

Communication and Collaboration. Virtual teams can be effective, but only if their leaders know how to communicate, collaborate, and coordinate teamwork using the available technologies and if they surmount the social challenges of virtual teams (Kozlowski et al., 2021). The authors continue to discuss the appearance of virtual teams being easy, but the responsibility of the leader to develop a shared understanding of goals and tasks to overcome challenges with respect to trust and social cohesion. Effective communication and collaboration must start with the leader. The research findings supports this statement. If leadership does not have effective communication and serves as the example for their perspective team members, the success of the relationship building can be impacted. In the case of the research participants, the leaders often described how the start of a process began with their actions and the team members would later mimic these actions when collaborating with their fellow team members. According to Newman and Ford (2021), virtual team leaders must create operational procedures and policies that define expectations for virtual team members. The authors recommend leaders to establish regular one-on-one meetings with team members and weekly team meetings to encourage development of

collaboration and relationships among members. As suggested by Cole et al. (2019), collaboration is an essential factor in leveraging team effectiveness.

Shared Leadership. Leadership is about fulfilling team needs, which may entail motivating and monitoring team processes, with the goal of enhancing team effectiveness (Nordbäck & Espinosa, 2019). Over the last two decades, there has been a growing advocacy of the benefits of adopting shared leadership as a means of enhancing team performance (D'Innocenzo et al., 2016). While traditional vertical leadership styles focus on the downward control from formally appointed leaders, shared leadership stresses the horizontal and lateral influence from group members. Additionally, shared leadership is rooted in team members interplays (Darban, 2021). D'Innocenzo et al. (2016) suggested shared leadership is an emergent and dynamic team phenomenon; whereby, leadership roles and influences are distributed among team members. Virtual team leaders, after establishing collaboration, should focus on shared leadership method, which is most effective for virtual team members. Newman and Ford (2021) continued by defining shared leadership as the process where team members each play a role in the collective leadership of team tasks, hence improving team performance and helping to build more cohesive interpersonal relationships and working together more closely. Shared leadership gives the members the ability to participate in collaborative decision-making, as well as influence and support other team members (Hoch & Dulebohn, 2017). Hoch and Kozlowski (2014) reasoned further that shared leadership creates strong bonds among team members and facilitates trust, cohesion, and team commitment.

Relationships Between Concepts, Theories, Actors, (and) Constructs

Northouse (2016) defined a team as a type of organizational group that is composed of members who are interdependent, share common goals, and must coordinate their activities to

accomplish the goals. Kayworth and Leidner (2002) noted the trend toward physically dispersed work groups has necessitated a fresh inquiry into the role and nature of team leadership in virtual settings. The concepts, theories, actors, and constructs discussed are all critical topics to consider in the focus of this research. As previously discussed, the disintegrating forces, such as lack of face-to-face interaction and time zone differences, can pose challenges for the virtual team leader if there is no focus on how to overcome these characteristics that are pertinent to virtual team existence. Cultural diversity, also previously discussed, can bring challenges to the virtual team leader and cause difficulties in ensuring relationships are developed. Equally important is leadership, ensuring the proper communication tools are in place for members to form relationships with their colleagues. Theories, like the concepts, were discussed as an important attribute to leaders supporting the development of relationships among team members. Two theories were identified, relational leadership theory and transformational leadership theory. Both theories recognize the importance of leadership's involvement to ensure building relationships among the virtual team members.

The actors in this research included leadership, team members, and the organizations as eligible because they meet the criteria for this research. The organizations identified as affiliated with the medical industry, having presence in the Charlotte, NC metropolitan area, and having teams that consist of virtually located team members. The constructs are the last concept of the framework that supports this research. Additionally, the constructs show the importance of leadership to communicate and give team members proper guidance and tools for communication and collaboration. Also, the importance of creating opportunities for shared leadership among the entire team. Shared leadership ultimately allows for horizontal and lateral influence from within the group (Darban, 2021). Hambley et al. (2007) suggested effective

virtual leaders need to encourage regular communication and establish various channels to support team communication.

Summary of the Research Framework.

The focus of this section was the conceptual framework for this research. The conceptual framework helps define why a researcher needs to study a particular topic (Imenda, 2014). Green (2014) submitted that a conceptual framework draws on concepts from various theories and findings to guide the research. The concepts, theories, actors, and constructs were noted. Each element was discussed in detail and the relationship to the research topic was identified. Figure 1 was used to further define the concepts, theories, actors, and constructs that are critical to this research. Imenda (2014) advised that a conceptual framework be defined as an end result of bringing together a number of related concepts to explain or predict a given event, or a broader understanding of the research problem.

Definition of Terms

Several terms are defined within this section to provide consistent understanding as they are utilized throughout the study.

Ambicultural Mode of Management: A management style that builds on the best managerial practice of all associated cultures, which is useful in today's global economy (Chen & Miller, 2011).

Creating Strategies: The term is defined as the context, selection, and use of appropriate communication channels and message content followed by the implementation and management of relationship-building strategies (Creswell & Poth, 2016).

Global Virtual Team: This term refers to a group of geographically dispersed individuals working together to achieve a common goal (Lauring & Jonasson, 2018).

Hill Model for Team Leadership: This model is based on functional leadership claim that the leader's job is to monitor the team and then take whatever action is necessary to ensure team effectiveness (Northouse, 2016).

Informed Consent: This term is an explicit agreement by participants to participate in the research process after receiving and comprehending information regarding the nature of the research (Hewitt, 2007).

Level of Relationship: This model refers to the level of personal relationship that the leader thinks is appropriate with the team to accomplish the organizational goals (Pauleen, 2004).

Paradigm: A basic model that reflects in-depth knowledge of what researchers observe coupled with the manner that they understand the model of the study (Kankam, 2019).

Relational Competencies: These competencies relate to developing social and interpersonal skills among team members to enhance the growth of relationships (Hart, 2016).

Relational Management: This management style relates to the ability of leaders to develop an interpersonal relationship that fosters a workable balance of cohesion, unity, and task motivation in the team (Pauleen, 2004).

Team Culture: As a set of norms, values, and beliefs that drive behavior and performance (Ruygrok, 2016).

Temporal Brokerage: Being in a position of bridging subgroups that have little or no temporal overlap with each other (Mell et al., 2021).

Assumptions, Limitations, Delimitations

In this qualitative research, assumptions, limitations, and delimitations exist. Qualitative research contains information that were considered true and factual but could not be verified in

the study (Creswell, 2014). These assumptions were discussed, identifying the potential risk, if any, and how the risk was mitigated. There are also limitations present in performing this study. Limitations can reveal a weakness in the study (Theofanidis & Fountouki, 2018). The delimitations of the research were identified including the boundaries of the scope of the research to eliminate any expectations that were outside of the research being performed. The information below provides the assumptions, limitations, and delimitations which could have had an impact on the study.

Assumptions

Grant (2014) suggested that there will be an assumption of authentic voice of individuals, literally reflecting the worlds of coherent participants and researchers. The author continues by suggesting although the motives behind engaging in conventional qualitative inquiry are well-intentioned, there is constant danger of inviting charges of insularity, parochialism, and theoretical deficiency. There are two assumptions identified in this study, authentic voice, and saturation. First, the discussion will move to authentic voice, focusing on the participants and their willingness to share truths about the organization. The next focus of discussion is the assumption that saturation will be met in this study.

Authentic Voice. The first assumption was each participant in this study, whether leader or team member, will acknowledge truths about the organization's dynamics that lead to virtual team success. Authenticity is generally conceptualized as a desirable state of a person, organization, or institution, in which there is a striving for truth, genuineness and transparency (Plust et al., 2021). The ambiguity and contradictions within and between individuals and their lives makes assumptions of coherent voice and assumed similarity between research participants problematic (Grant, 2014). Sometimes perception and reality are at opposite ends of the

spectrum; thus, the responses could be based on perception. In this case, the risk transpires if the leader perceives the team is successful and contributes to the organization's success. Participant's authentic voice represents their genuine voice which requires learning how to modulate its use (Patterson et al., 2020). To mitigate any potential risks associated with this assumption, the researcher will encourage authenticity from the participants and inform them the major contribution this research could have on the success of organizations in the future. Patterson et al. (2020) suggested that their authentic voice will play a major role in the developmental step in contributing to organizations, learning to work with team members and assistance in successfully leading initiatives. Mitigating the risk of these assumptions will require a discussion with the participant. The focus of this discussion will be current opportunities available for the team members to interact, both virtually and face-to-face, how the impact on organizational success is influenced by these relationships, and the team members' ability to depend on each other for this success. Also, there should be no unsubstantiated recordings of activities that were of personal interest to the participant. The researcher, according to Höjjer (2008), does not need to bother about other things, just focus on doing good interviews, checking facts and stories, and analyzing and reporting fairly.

Saturation. The second assumption was the concept of achieving saturation in a qualitative research study. According to Sebele-Mpofu (2020), the concept of meeting saturation has gained momentum as a contemporary route to enhance qualitative research. However, Low (2019) suggested most of the current studies on saturation concentrate largely on how many interviews, how big the sample size or how many focus groups are required to attain saturation point. There is little focus on developing a conceptual and didactic definition of what saturation is. There is minimal methodological research available on the specifications or guidelines that

shape saturation, what it entails, how to evaluate it as well as on the specific and transparent parameters on how to accomplish it. Low (2019) suggested there are always new theoretic insights to be made if data continues to be collected and analyzed. Sebele-Mpofu (2020) concluded there are various forms of saturation and with varying underlying propositions. Therefore, to apply meaningfully the concept researchers must appreciate the forms of saturation and link the appropriate form to their qualitative research design. To mitigate any potential risks associated with this assumption, the researcher follow the defined way of resolution of saturation described by Hennink et al. (2019). The authors' further stated when the sufficiency of the sample enables the researcher to generate adequate, logical, and copious data.

Limitations

Various limitations have existed in previous research that leads to the need for this topic. Chang et al. (2020) discussed limitations in their qualitative research suggesting that some research factors cannot be refined even though it strives to be objective and rigorous. However, this research, like its predecessors, had certain restrictions. There are three limitations identified in this study (a) potentially small sample size, (b) diversity, and (c) biases due to its subjective nature.

Potentially Small Sample Size. Other than selecting a research topic's appropriate research design, no other research task is more fundamental to creating credible research than obtaining an adequate sample (Marshall et al., 2013). The authors recommend that qualitative sampling designs specify minimum samples based on expected reasonable coverage of the phenomenon given the purpose of the study and stakeholder interests. The potential for small sample size in this research was due to the focus on a particular region, Charlotte Metropolitan, and on a particular industry, medical products producers. This leads to other research

opportunities to focus on particular sectors. To prevent this limitation from threatening the study and having too small of a sample size, the researcher will follow instructions suggested by Patton (2002) in the author's writing regarding qualitative evaluation and research methods. The author suggests at the beginning of the research process, a minimum expected sample size should be specified and build the rationale for that minimum. In the end, the author continues, sample size adequacy is subject to peer review, consensual validation, and judgment.

Diversity. As firms move toward flatter organizational structures and teams are globally effective, interaction among diverse workers becomes more critical to smooth organizational functioning (Jackson & Ruderman, 1995). The second limitation was the focus on the various areas of diversity among team members. Diverse cultural differences were a consideration for this research. The aspects of diversity not considered are gender, educational levels, or experience levels, impacting the relationships formed among team members. Scholars and practitioners seldom contest the importance of diversity in organizations (Holck, 2018). The research performed by Holck (2018) considered issues of ethnicity, gender, age, and educational background, with heavy focus participants' perceptions of the workplace in relation to the work culture, diversity, and collaboration. To prevent this limitation from threatening the study, the researcher will acknowledge the importance or need for additional research. While this research only evaluates the importance of cultural differences, the importance of diversity within a virtual team does not have any less importance than culture, leaving the need for additional research in this area.

Biases Due to Subjective Nature. The third limitation is the subjective nature of qualitative research which indicates that some biases might be brought by the researcher when performing the research and analyzing the data. Morgado et al. (2017) addressed this in their

research and suggest that subjective analysis is the essence and nature of qualitative studies; therefore, it is difficult to rule out potential researcher bias, but an attempt at neutrality is the best mitigation strategy in this case. According to Ryan et al. (2007), qualitative research does not regard truth as objective, but as subjective reality experienced differently by research participants. The authors continue to describe qualitative methods as concerned with experiences, feelings, and attitudes as opposed to precise measurement and statistical analysis, lending to its subjective nature of research. Because of the subjective nature, it is often regarded as more difficult to critique. To prevent this limitation from threatening the study, the researcher acknowledged the existing beliefs and biases. Creswell and Miller (2000) suggested this will allow readers to understand their positions, and then to suspend those biases of the researcher as the study proceeds.

Delimitations

Delimitations are the limitations consciously set by the author (Theofanidis & Fountouki, 2018). The authors continue to describe delimitation as boundaries or limits of the work so that the study's aims and objectives do not become impossible to achieve. The purpose of this qualitative case study was to highlight the methods and tools used by leadership to aid in relationship-building among virtual team members. There were two delimitations proposed for this research study. The first delimitation discussed was the targeted population for the study. This population will be limited to the Charlotte, North Carolina metropolitan area. The second delimitation is team size.

The consideration for this research included organizations in the Charlotte, North Carolina metropolitan area, and only included organizations with virtual teams, but will not exclude teams that have both virtual and face-to-face team members. In this study, the focus of

the research was on the virtual teams. This criterion was selected because the research was better controlled when a regional segment is the focus. A larger geographical area could require more parameters to be considered and would compromise the focus of the research. A larger geographical area would also require a longer period of time in order to perform interviews with the participants.

There was no maximum requirement for team size in this research. However, the research required the group to consist of a leader and two or more team members not located in the same office. However, the team member's duties and responsibilities must be interrelated to be included in this study. There must be some relationship between the team member's duties that would benefit from collaboration and relationship building. Also, if the team size is greater than five, a maximum of three participants representing the team would be included in the study. One of the three participants included the leader.

The researcher set the discussed delimitations forth. The researcher must set delimitations, as suggested by Theofanidis and Fountouki (2018), as boundaries or limits of their work so that the study's aims and objectives do not become impossible to achieve. Simon and Goes (2010) suggested the delimitations of a study are those characteristics that arise from limitations in the scope of the study and by the conscious exclusionary and inclusionary decisions made during the development of the study plan. The researcher has chosen to limit the study to a specific geographical area and the number of participants to provide a focused case study.

Significance of the Study

This qualitative study's significance is to show the importance of leaders taking the necessary steps to create an environment that aids in relationship-building among the members

of a virtual team. Leaders and members of virtual teams do not always have the opportunity to seek training and development to overcome the challenges of being culturally and geographically distant (Hart, 2016). The author further discusses ideas of developing relationships via computer-mediated technologies but emphasizes there is no existing understanding of the positive impact of virtual mentoring. Hart (2016) continued by stating that organizations and leaders must focus efforts on fostering informal, supportive, mentoring relationships in virtual work contexts which is achievable through a variety of technological media. Understanding the competencies of virtual leadership effectiveness is essential and vital to organizational success (Maduka et al., 2018).

Reduction of Gaps in the Literature

This study assessed how leadership in organizations creates opportunities to aid in developing relationships among virtual team members. The objective was to reduce the gaps in research where there is currently no focus on how leadership forms cohesive team relationships where virtual interaction is a part of the team's daily routine. According to Maes and Weldy (2018), leadership's necessary actions are to instruct team members on how to build relationships, how to communicate appropriately, and how to resolve conflict creatively. Hart (2016) suggested further research is needed to validate leadership behaviors as a next step in understanding virtual developmental relationships. Ashmi (2017) discussed effective leadership and its importance in team success. Further pointing out trust among the team members and sharing knowledge are requirements for good virtual team outcomes. The author discusses the development of trust, formation of social relationships, sharing of information are all factors regarding effectiveness of a virtual team and are to be integrated and executed by the virtual team leader. While these writings mentioned above focus on the need for trust and knowledge

sharing and cohesiveness, none discuss how leadership will ensure relationships are developed so these characteristics are realized.

Other research, such as that performed by Kayworth and Leidner (2002), addressed the effectiveness of leadership in global teams. The authors suggest the use of virtual teams poses significant challenges for organizations wishing to deploy them. The authors continue by posing the same challenges can be present for both virtual and traditional teams, but more pronounced in virtual settings. These challenges include the complexities of virtual teams. Communication, culture differences, logistics, and technologies. Communication has always been viewed as a key element in any group, in virtual teams, however, the lack of prior history and thus an absence of shared understanding, and temporal/geographic dispersions makes communication critical (Sarker et al., 2011). A point of focus in this research is to understand if leadership's role in relationship building has any focus on communication and the challenges that it poses for the virtual team.

Cultural differences in global teams are likely to create faultiness, which is dividing lines associated with differences in values, belief, and organizational behavior (Gibbs & Boyraz, 2015). Previous research on multicultural teams tends to exhibit a bias toward focusing on the negative effect of the level of cultural diversity of the team rather than the positive aspects (Stahl et al., 2016). The foreignness of cultural knowledge are challenges faced by organizations when they enter countries that are considered strange and unfamiliar territories. The authors continue that companies have found that accentuating foreignness, rather than deemphasizing it, can give them a competitive edge over local competitors in the countries where they operate. This research evaluated if the foreignness is also beneficial to virtual teams. The goal was to reveal if

there are any beneficial outcomes of cultural differences such as increased levels of creativity or higher quality of problem solving.

Implications for Biblical Integration

Blanchard et al. (2016) suggested that leadership can be as intimate as speaking words of guidance and encouragement to a loved one or as formal as passing instructions along extended lines of communication in an organization. Lee et al. (2020) suggested that when leaders, as servant leaders, focus on their followers' needs, this can have a positive effect on organizational functioning. Servant leadership has been shown to relate to various performances related outcomes. Heyler and Martin (2018) suggested the idea of a servant in organizations normally applies to the employee; however, servant leadership theory inverts the pyramid of the organization such that leaders are serving the other members of the organization. Liden et al. (2014) mentioned that global trends require managers to utilize leadership approaches that develop employees to their full potential. Otero-Neira et al. (2016) suggested servant leadership refers to a leadership stance more than a leadership style. This style is philosophy of leadership that permeates every function of a leader's practices. Unlike most leaders devoted to maximizing personal or organizational interests, servant leaders are devoted to employee needs and development (Lu et al., 2019). Matthew 20:27 (NIV) states whoever wants to be first must be your slave – just as the Son of Man did not come to be served, but to serve. Also, in Matthew 23:11(NIV) the servant is viewed as the greatest; it states, “the greatest among you will be your servant.” Perhaps the greatest lesson of servant leadership is shown in Philippians 2:3(NIV) which states “Do nothing out of selfish ambition or vain conceit. Rather, in humility value others above yourselves.” The Bible teaches us (Colossians 3:23 NIV) whatever you do, work at it with all your heart, as working for the Lord, not for human masters. The servant leader may have the

ability to affect organizations in a significant manner that improves individual, group and organizational performance (Heyler & Martin, 2018).

Benefit to Business Practice and Relationship to Cognate

There is currently great interest in leadership as a process of social influence because its effectiveness is critical for economic, political, and organizational success (Elche et al., 2020). Although some research on virtual team leadership styles exists, there is relatively little research on how leadership affects virtual team interaction and performance (Hambley et al., 2007). High quality relationships have been identified as a key factor in enhanced team performance (Fernandez & Jawadi, 2015). The author continues by suggesting leaders of virtual teams need to encourage team members to exchange social information to help them to get to know each other better and to assess their behaviors and build shared norms. The author notes there are two main ways to do this: face-to-face meetings and team-building exercises. Virtual teams are more difficult to lead than face-to-face teams characterized by presence and direct interaction (Efimov et al., 2020). Fernandez and Jawadi (2015) advised that as virtual teams spread across organizational, functional, and professional boundaries, they may include members from different cultures who speak different languages and have different perceptions and referents. Virtual team leaders must deal with this diversity and find a common area of understanding, establishing a set of collective and accepted norms to guide behaviors. Leaders also need to intervene at the appropriate moment to resolve any misunderstandings related to language barriers or conflicting perceptions. Maynard et al. (2019) suggested when virtual team members are more familiar with one another, they will be more likely to share, elaborate upon, and integrate diverse information that will lead to improved outcomes. While research exists that has evaluated the importance of team member relationships, the current research does not assess

leadership's responsibility in ensuring strong relationships are developed among virtual team members. This research helped to address this missing connection and especially in an environment where virtual teams are gaining more of a presence in organizations.

Summary of the Significance of the Study.

The significance of this study was to reduce the gaps in research that examines leadership's role in aiding relationship-building among virtual team members. Hart (2016) suggested there has been a proliferation for virtual work and virtual teams for more than 25 years, yet it seems that virtual leaders and team members are still looking for definitive solutions for how to be most effective. The author further suggests additional research to validate leadership behaviors would be useful as a next step in understanding virtual developmental relationships. The concepts, theories, actors, and constructs discussed in this section show the critical items, the foundation, needed for leadership to enforce the building of relationships among virtual team members. Virtual team leaders, who are also Christians, must look to serve and not be served as suggested by Blanchard et al. (2016) and Keller and Alsdorf (2012). Keller and Alsdorf (2012) suggested the way to serve God at work is to work from a Christian motivation to glorify God, seeking to engage and influence culture to that end. Servant leadership, as discussed by Blanchard et al. (2016), begins with a clear and compelling vision of the future that excites passion in the leader and commitment in those who follow.

A Review of the Professional and Academic Literature

Leadership is critical to a team's success (Lin et al., 2014). Bell and Kozlowski (2002) submitted that most models of group and team effectiveness recognize the critical role of team leaders. Cote (2017) suggested leaders are considered the saviors and heroes for organizations in crisis whereby influencing the followers through persuasion to achieve common organizational

goals. The study of leadership is multi-faceted, as researchers have focused on various leadership qualities, behaviors, processes, and structures to understand better effective leadership (Iorio & Taylor, 2015). Global competition and advances in technology have enhanced the need for virtual teams and understanding the competencies needed for virtual leadership effectiveness is essential and vital to organizational success (Maduka et al., 2018). Active and sustained engagement by leaders is particularly challenging in virtual teams because, in many cases, presence and participation can only be signaled verbally; whereas, in traditional settings, they can be signaled non-verbally, such as using eye contact during a discussion to indicate engagement.

There are previous studies that focus on leadership of virtual teams, the tools, challenges, and opportunities of team leadership. This section highlighted some of these studies and discussed in detail. The purpose of this overview of professional and academic literature was to show the gaps in existing literature with focus on leadership's involvement with relationship develop among virtual team members. This section included an exploration, in more detail, of the concepts, theories, and constructs already mentioned in the previous sections. The goal was to review previous research on these topics and to reveal where gaps exist in showing the importance of leadership's role in building relationships among team members, especially when the members do not reside in the same location or sometimes time zone.

The literature review revealed the gap in current studies that failed to discuss how leadership should aid in the development of relationships among virtual team members and showed the need for additional research in this area. Also, in the analysis, previous discussions of the approach leaders used to develop relationships among team members showed a lack of focus on this area. Finally, the evaluation of relationships among virtual team members and the team's

impact and, ultimately, the organization were reviewed. All topics included in the review revealed previous research and how the interpretation had not focused on leadership's vital role in building relationships with virtual team members.

Business Practices

From a simple pair of gloves to implantable defibrillators, medical devices are essential to health, to maintain our quality of life, and accompany us all throughout our existence (Fourtier & Bertram, 2014). The authors continue by suggesting that medical devices contribute to improving quality and effectiveness of healthcare, describing it as a heterogeneous, innovative dynamic and growing sector. Globally, the medical device industry is highly driven by a few big markets such as the United States, Japan, Germany, and China with the United States holding the largest market at \$172.9 billion, followed by Japan (428.9 billion), Germany (\$28.5 billion), and China (\$27.3 billion; Kim et al., 2021). The authors also described the global medical industry as both large established companies and thousands of small companies. Further stating that large companies focus on taking the lead in terms of revenue, small companies play a critical role as the source of innovation in the earlier stages of research and development.

The U.S. medical device industry includes the producers of medical devices and diagnostic tests regulated by the U.S. Food and Drug Administration (FDA; Chatterji et al., 2019), as well as therapeutic and surgical devices, patient monitoring, and diagnostic and medical imaging devices (Maresova et al., 2020). Chatterji et al. (2019) further qualified medical devices as generally falling into discrete medical specialty areas, reflecting distinct customer markets (i.e., physician specialties), including but not limited to cardiovascular (e.g., devices such as artificial hearts and pacemakers) and orthopedics such as replacement joints. In their discussion, Faris and Shuren (2017) stated that patients and the public rely on regulators to

ensure that legally marketed medical devices have been shown to be safe and effective. The regulators, FDA, expect data to be provided by the device manufacturers and this data to reflect the risk profile of the device. The process of developing medical devices justifies the use of the innovation experience as a fine-grained measure of capabilities, given the complexity and precision of the scientific and engineering inputs into medical device development (Wu, 2013). The medical device industry, as discussed in research by Farhikhteh et al. (2020), is competitive on a global level. Further stating competitiveness provides national economic sustainability, growth or maintains life standard based on per-capita income.

The production and use of medical devices is subject to several laws, regulations, strict standards, and certification processes according to Maresova et al. (2020). Medical device manufacturers face a single regulatory body across the European Union (EU) and to be allowed on the market, a medical device must meet the requirements set by the EU Medical Device Directive. These devices must receive a Conformance' Européenne (CE) marking certificate before they can be sold on the market. Likewise, in the United States, the world leader in the medical device market, the body responsible for regulating companies that manufacture, import, and sell medical devices is the FDA's Center for Devices and Radiological Health (CDRH). Medical device companies are exploring the regulatory approval of products in multiple jurisdictions and are required to meet the requirements of both CE and FDA's CDRH for readiness of distribution in various markets (Kim et al., 2021). Organizations such as medical device producers can utilize virtual teams because, according to Angelo and McCarthy (2021), virtual teams offer the ability to organize expertise and talent from around the world, while maintaining flexibility and agility, reducing operating costs.

Virtual working first became possible in the 1990s with the advent of the internet and became fully effective over the last 5 to 10 years (Birkinshaw et al., 2021). A virtual team, as defined by Suchan and Hayzak (2001), is a collection of geographically dispersed individuals from different functions, specialties, or even organizations who become a group to complete specific, usually complex tasks. Further stating that virtual teams have given organizations the agility to leverage the human knowledge and resources that older structures make difficult to use effectively and creatively. Virtual teams have become the norm in business (Angelo & McCarthy 2021). The authors point out that large employers are utilizing teams where members are dispersed geographically, with the goal of enhancing the productivity of the group. According to research performed in 2012 by the Society of Human Resource Management (SHRM), 46% of the 379 human resource professionals that participated in the research reported their organization use virtual teams. Similarly in 2014, a group of 3000 global managers surveyed reported that 40% of their employees worked on virtual teams and 77% of these employees were on multi-cultural teams.

The shift towards a virtual organization is related to a fundamental change in managing daily operations bringing people together across disciplines, departments, functions, and geographical locations, according to Vakola and Wilson (2004). The Gartner Group survey estimated in 2000 that by 2004 up to 60% of all professional and management tasks within the world's biggest multi-national corporations would be completed by virtual teams (Jimenez et al., 2017). The authors continue by discussing the advantages of virtual teams in organizations. Virtual teams, according to the authors, are an effective work arrangement for problem solving, global innovations, and project management. Also touting additional advantages, including flexibility with respect to (a) geography and timing, (b) economic benefits of having the ability

to bring together best talent regardless of the team members' location, and finally, and (c) the cost benefit of the participation of team members without the required cost of travel. Jimenez et al. (2017) stated communication and coordination, however, can pose unique challenges for virtual teams.

The Problem

According to Pauleen (2004), virtual team leaders must not only manage the project tasks and occasional personality conflicts normally associated with a collocated team but must also be able to guide a team of geographically distributed, and often organizationally and culturally different individuals in creating a common purpose. In their research regarding leadership roles in virtual teams, Wakefield et al. (2008) suggested that the need for a virtual team leader is important and recognized; however, little empirical research examines the virtual team leader explicitly. The authors reflect on previous works that identify relationships among team members and conflict management as the team leader's two essential responsibilities. The authors also point out that mentorship is important. This study evaluates the behavioral complexity in leadership (BCL) theory, particularly the leader's duties in various areas that are necessary to have a successful team. Using the four quadrants of Quinn's Model of Leadership Roles, the authors suggest that virtual team success depends on the leader's ability to assume roles that manage conflict before the conflict negatively impacts team outcomes. The research focuses on quadrant III and IV. Quadrant III accentuates control and stability within a group for which the leader is responsible, and quadrant IV focuses on human relations (Wakefield et al., 2008). Quadrant IV targets human interactions between the members of the virtual team members.

Further evaluation of these quadrants in this research, Wakefield et al. (2008) showed that team members should work in an interdependent manner. If not, the consequences could be a lack of development of relationships among the team members. The virtual team leader needs to coordinate across a diverse set of team members and facilitate and share how the work is to be conducted.

The challenge for leaders of virtual teams is to create a level of collaboration and productivity that rivals the experience of the best collocated teams, and to accomplish these outcomes against the backdrop of the rapid changes facing nearly every business. Virtual team leaders must be able to facilitate team cohesiveness by taking full advantage of existing and emerging collaborative technologies (Kerber & Buono, 2004). Research performed by Birkinshaw et al. (2021) has revealed the rapid move to virtual teams in March 2020, due to the presence of the Coronavirus Disease 2019 (COVID 19) pandemic, has shown that managers were motivated and committed to the success of virtual teams. Also showing the situation has deleterious effects on the effectiveness of management they turn inward and become task-focused at the expense of relationship-building. Active and sustained engagement by leaders is particularly challenging in virtual teams, because in many cases, presence and participation can only be signaled verbally; whereas, in traditional settings, they can be signaled non-verbally (e.g., by using eye contact during the discussion to indicate engagement; Iorio & Taylor, 2015).

Toegel and Barsoux (2019) discussed undiscussable topics among team members. The authors suggest the undiscussable topics exist because they help people avoid short-term conflicts, threats, and embarrassment. Adding that they also short-circuit the inquiries and challenges essential to both improving performance and promoting team learning and ultimately team effectiveness. The authors are concerned that the lack of addressing difficult topics are

becoming more prevalent due to increase in globally distributed. The authors suggest with fewer opportunities to raise undiscussables face-to-face, it becomes even more important to identify and convey concerns before they escalate, and team and organizational performance begins to suffer (Toegel & Barsoux, 2019). In the research performed by the authors, and working with team leaderships, the symptoms leadership presented ranged from unresolved conflicts among team members and uneven participation in meetings to destructive group think and employee disengagement. Also, the authors have discovered that team leaders tend to overestimate the risks of addressing undiscussables. The authors add that team leaders assume that talking about negative subjects will (a) deduce team energy, (b) reveal issues they cannot resolve, and (c) expose them to blame for the part they played in creating the problems faced by the group. The research showed quite the opposite. Revealing that discussing the undiscussables bring relief, boosts energy, and bolsters team goodwill. Also, discovered in the research performed by Toegel and Barsoux (2019), team leaders underestimate the consequences of doing nothing to address undiscussables. Ignoring results in strained working relationships that produce ineffective meetings marked by a lack of debate. This leads to bad decisions that are made worse, because without open honest discussion, a team cannot learn from its mistakes or correct course. As suggested by the authors, if the undiscussables are left unmanaged, the team will become contaminated, the problem-solving abilities and capacity to learn and adapt to change will be stifled.

In the qualitative study performed by Archer (2009), the author evaluated the impact on a team and its members learning how to work through the undiscussables and understanding the role of leadership as well as the team members. The anticipated outcome of this 10-month process provides that the team members would develop more candid and honest conversations

and there would be fewer undiscussables; therefore, enhancing team performance and improving business outcomes. Initial research findings were about the lack of developed relationships among the team members as well as the leadership. According to Archer (2009), the combination of “new to the company” and longer-tenured team members as well as a new leader who seemed determined to “put the past behind us” resulted in low levels of trust and several major undiscussables (p. 85). Trust, according to Dube and Marnewick (2016), is a critical component in virtual teams because of the geographic dispersion and lack of face-to-face interaction among team members.

After a 10-month period of working both individually and in a team environment to develop better cohesive relationships and working atmosphere, the result of the research was not straightforward. According to Archer (2009), most members felt positively affected at a personal level, were aware of their own defensive patterns in team interactions and believed that they would take the learning into their work on future teams. Some, continued the author, reported ways in which they were already utilizing their individual learnings with their own work groups and in other team environments. The author concluded that a closer examination of the team dynamics revealed that the key factors which influenced the team's success or failure were the authority issues around the leader's role and a flawed team structure.

Trust, according to Jong et al. (2021), is characterized by shared perceptions among members often enhancing team performance. Building a level of trust that is essential to a high-functioning team can be difficult without face-to-face time together (Kligler, 2017). The author points out that the subtle communication signals that are normally relied on to read the emotions of others, such as facial expressions, body language, and other non-verbal approaches are missing in a virtual team versus a face-to-face team. These missing attributes might prevent the

leader from knowing how to enhance relationship-building techniques by ensuring the staff feels comfortable and relaxed.

While many challenges associated with virtual teams are similar to those of collocated teams, virtual team leaders typically find that achieving alignment and commitment to the team's purpose are far more challenging to virtual teams (Kligler, 2017). These challenges are unique, especially in a relationship-based model of leadership. The author describes some of the challenges consist of difficulty building trust and lack of accountability. Based on past research, face-to-face team leadership has been defined in terms of problem-solving activities directed at the generation of solutions that advance team goal attainment (Zaccaro et al., 2001). Further pointing out that functional leadership and success of the team defines a leader's effectiveness. The authors further contend that the leadership processes will influence team effectiveness by affecting four-team practices: (a) cognitive, (b) motivational, (c) affective, and (d) coordination. This leads to the realization that relationship-building in face-to-face teams do not have the same recognition as they do in virtual teams. This is due to the idea that relationships, whether good or bad, are automatically developed among co-located team members.

In the research performed by Pauleen (2004), the author stated that leadership is said to face challenges, but these challenges are magnified when the team members are located in different geographical locations. Leaders are forced to work with the confinement of varying time zones and various cultural boundaries. Therefore, the team members must be able to work beyond these things that can be identified as obstacles. Pauleen (2004) continued to address the topic of relationship-building as a critical and fundamental component to team success, identifying leaders as "relationship moderators" who are responsible for ensuring these relationships are built.

Virtual Research and Development (R&D) project teams are faced with challenges, especially with relationship management, as high-quality relationships are expected to enhance creativity and innovation (Fernandez & Jawadi, 2015). The uniqueness of R&D activities can create difficulties for leadership to aid in the development of relationships and can prove traditional approaches ineffective. The authors further conclude that R&D teams with a leader involved in building relationships are shown to produce higher-quality relationships than those without a leader. It also proves that relationships in virtual teams are developed by using task relations activities over social activities.

Concepts

For a group of people to function effectively in a virtual working environment as a team, they must have a shared sense of purpose and perceive themselves as an entity, with a unique team identity (Darics & Gatti, 2019). This section addresses previous literature regarding concepts that impact the virtual team's ability to achieve this identity with the direction of leadership. Understanding leadership functioning in virtual teams becomes critical as organizations increasingly use dispersed teams to acquire talent (Liao, 2017). The concepts discussed in this research are: (a) disintegrating forces that pull virtual teams apart, (b) team culture, (c) clearly defined relational and performance expectations, and (d) the communication tools that influence relationship-building. This section of the study focused on literature that has been published with a focus on these concepts.

Disintegrating Forces. Leadership plays an important role in overcoming challenges of virtual teams and realizing potential benefits (Liao, 2017). The disintegrating forces considered in this research are time zone differences, cultural diversity, and a general lack of face-to-face contact and interaction preventing the building of relationships among virtual team members.

Virtual teams show geographically dispersed characteristics because their members are located in various places and have fewer opportunities for direct interaction than those working near each other (Cramton & Webber, 2005). Espinosa et al. (2015) suggested that when workers collaborate across time zones the temporal distance (i.e., work schedule difference between the team members) becomes a key factor affecting how they interact and perform.

Time Zone Differences. As organizations have shifted from hierarchical and rigid bureaucratic structures towards more organic organizational designs, work teams have become more prevalent (Jimenez et al., 2017). Members of global virtual teams may span across time zones. According to Mell et al. (2021), global teams are becoming increasingly prevalent and important in today's knowledge-intensive organizations. Further noting the dispersion of team members across multiple time zones-referred to as temporal dispersion- is a critical challenge global team's face. One of the challenges identified by the authors is less temporal overlap—limited overlap in waking and working hours-limits opportunities for synchronous interaction. Butler et al. (2021) suggested various constructs to time zone differences among team members.

These challenges are many and include (a) team members cannot work a full day together, (b) access to other team members and project sights is limited, (c) meetings will occur at irregular hours to facilitate different team locations, (d) team members experience a 24 to 48 hour delay for queries across project locations, (e) some project locations must work irregular hours to facilitate other project locations, and (f) operating across multiple times zones is necessary. The authors further reveal a time zone difference has a highly negative impact on the effectiveness of team interaction. Jimenez et al. (2017) suggested this could also be an opportunity for leaders to have 24 hours of hands-on work with the project. The authors refer to the opportunity as a 24-hour relay. If team members are located in Asia and Australia,

Europe/Africa, and the United States, there is an opportunity to have someone working on tasks 24 hours a day. The benefit for leadership is the increase in time of project completion giving the team, and ultimately the organization, a competitive advantage.

Cultural Diversity. Culture is a complex, multidimensional construct that can be studied on several levels: international, national, regional, business, and organizational (Shachaff, 2008). Diversity is one of the main characteristics when it comes to virtual teams, most of the time the members of the team are from different regions and having different languages, cultures traditions, values, and identities (Stratone & Vatamanescu, 2019). In order to face the differences between the members of a team, continue the authors, it is important to develop a culture for the team, to create trust and supportive relationships. In this research, the national culture, the country of residence, of the team members will be the focus. Shachaff (2008) suggested culture is defined as “the collective programming of the mind which distinguishes the members of one group or category of people from another” (p. 132). The author pointed out that cultural diversity increases the complexity, conflict, confusion, and ambiguity of communication which sets higher challenges for leaders and team members. There is no evidence in this research of leadership developing relationships among team members would reduce the challenges and create a more effective team.

Similarly, Presbitero (2020) wrote about cultural diversity and its impact on global virtual teams and leadership. The author points out that leaders play a critical role in the effective functioning of global virtual teams. The team leader is responsible for understanding how cultural dissimilarities have an impact on performance, relationships, and effectiveness of team performance. Stahl and Maznevski (2021) suggested diversity can be a source of friction and conflict, hence an obstacle to effective team functioning. Also, raising a contrast to this, the

authors pose that diversity can also be a source of synergy and learning—a powerful seed for something new, depending on factors that are poorly understood and under explored. The authors pose that when cultural diversity exists among team members, in order to positively address potential conflicts, there should be a way to handle the friction and conflict that could arise. Suggesting there should be processes for gains and losses through forces of divergence and barriers to convergence. A divergent process, as explained by the authors, creates a process gain and may contribute positively to team performance is creativity. A divergent process that creates a process loss will decrease team performance is conflict. Convergent processes, as described by the authors, are those which provide integration and cohesion, and align the team around common goals and values. Examples of convergent processes would be the emergence of group identity and mutual trust.

Lack of Face-to-Face Contact and Interaction. Face-to-face contact and interaction is another disintegrating force to be discussed. One challenge in virtual work is the elimination of face-to-face meetings that help team members build interpersonal relationships and form impressions of others (Cummings, 2012). According to Maynard et al. (2019), team members who possess interpersonal knowledge of one another are more likely to trust each other and the familiarity may shape the team's ability to exchange and integrate information that is communicated among members. The authors continued by suggesting that when global virtual team members are more familiar with one another, they will be more likely to share, elaborate upon, and integrate diverse information that will lead to improved outcomes. In their research, Cummings (2012) evaluated the use of enterprise social networking sites (ESNS) as a potential solution to overcome the lack of face-to-face contact in virtual teams. The researchers describe

ESNS as having many of the same components found in public social networks sites but used internally in the workplace.

Continuing that when compared to traditional social networking sites, many employees share more personal information via the ESNS because they felt that the information was more secure on an ESNS. Therefore, allowing the virtual employees to become more familiar with their colleagues in many cases forming an initial impression of the other team members prior to working together. Continuing to focus on the use of ESNS, Cummings (2012) examined the impact of information appearing in the ESNS on perceptions of future team members and how these perceptions influence team member's preferences. The authors have revealed that the ESNSs can have a profound organizational implication when employees use them to meet team members for the first time and can influence the preferences for team members. There is no focus on the role that leadership should play in this type of relationship building, therefore, additional research on this topic.

In research performed by Rogers et al. (2021), the authors confirmed the critical role that face-to-face and virtual project teams play in producing good organizational results. The authors have revealed that individual skills had a greater influence on teammate satisfaction in face-to-face teams than in virtual teams. In this research, unlike the previously discussed research, there is focus on the role of leadership. The authors imply that leadership must focus on developing and selecting team members who are best suited for virtual teams and if the face-to-face members have the correct skills they can adapt to social distance with physical proximity. The research performed by Rogers et al. (2021) also suggested that leaders must select team members who are capable of interacting and forming relationships even if it is in an environment of videoconferencing. Weak social relations undermine team effectiveness, and as long as face-to-

face members have adequate skills, they may easily overcome social distance with physical proximity.

Team Culture. Team culture influences the knowledge sharing behavior of team members (Jamshed & Majeed, 2019). A conducive team culture, explains the authors, enables team members to understand their team members' emotions and provides a platform for sharing knowledge. Team culture comprises vision, norms, and principles, and provides initiative for participation; thereby, team members become familiar with all knowledge that formulates the culture of a team (Jamshed & Majeed, 2019). Lowik et al. (2016) suggested team members share objectives, purposes, values, standards, procedures, and knowledge that dictate their ways of acting, exchanging knowledge, solving problems, and innovating, and differentiating one group from another. Shah et al. (2022) gave a basic definition of team culture suggesting it is made up of the values, beliefs, attitudes, and behaviors shared by a team. Further suggesting that team-based working has become the dominant mode of work in organizations replacing traditional organizations revolving around individuals.

Team effectiveness is a function of team culture, according to Shah et al. (2022), and team culture is based on norms, expectations, and roles of the team members. The authors continue to suggest that creating a strong team culture, an organization must derive from a pre-existing culture that will drive organizations' success and that same pattern will help the new team members to develop new services for organizational success. Creating a team is the first step, next the team must be managed effectively to derive the synergistic benefits of teamwork. The result of research performed by Shah et al. (2022) was that organizational team culture plays an important role in team effectiveness. Important attributes of team culture are communication, participation, trust, and training inputs. Also revealed in the research was management support

for teamwork are take care and nurtured ultimately leads to the team achieving team effectiveness.

Similarly in the research performed by Jamshed and Majeed (2019), the goal was (a) to explore the influence of team culture on team performance, (b) to investigate the mediating effects of knowledge sharing and team emotional intelligence on the relationship between team culture and team performance, and (c) to explore the association between the factors of knowledge sharing and team emotional intelligence. The industry focused on within this study is specific to the healthcare industry. The result of the research findings acknowledges a direct relationship between team culture and team performance. Jamshed and Majeed (2019) concluded that the team performs better when members exchange rich and diversified knowledge with each other. Adding, when team members achieve the highest standards of performance; members encourage each other to share their expertise by interacting more intensively stimulated by participative team culture.

Clearly Define Relational and Performance Expectations. By definition, a virtual environment fundamentally transforms the way in which teams work (Beranek & Martz, 2005). The virtual environment, continues the authors, makes communication and collaboration a critical part of the team's success. Clearly defining relational and performance expectations is the focus of this section. Newman et al. (2020a) focused on strategies for leadership to align performance expectations across organizations. The authors suggest misalignments in performance expectations lead to a divergence between virtual teams' perceptions of performance expectations and this divergence can lead to major organizational performance issues. The authors continue by suggesting the challenge for organizational leaders in communicating performance expectations to their employees does not diminish, especially for

employees that work virtually. Adding that distance amplifies communication challenges because usually less information, especially informal and non-verbal, is communicated to those not located in the same place.

Newman et al. (2020) discussed leadership strategies for defining relational and performance expectations that will result in higher performance and putting the organization in a competitive advantage over the competition. The authors discuss the key leadership factors for setting the expectations, which include (a) leadership communication, (b) translating the leadership objectives and priorities into meaningful work tasks, and (c) communicating organizational policies and objectives. The failure of leadership to provide clarity will make it difficult for employees to recognize the priorities, according to Newman et al. (2020b). The key approach for leadership, according to the authors, is to properly align with employees throughout the organization. Importance must be given to ensure factors that increase both horizontal (across many departments (e.g., sales/marketing to operations, to customer service, etc.) and vertical (i.e., senior leadership to subordinate levels) alignment are implemented throughout the organization.

Values, whether individual or organizational, shape attitudes, preferences, priorities, and behavior. Moreover, there is considerable support for the fact that companies guided by their values perform better (Dominick et al., 2021). Rhoades (2011) argued that companies with values-based cultures attain greater customer and employee satisfaction and financial return.

Communication Tools Influence Team Relationship. Communicating to virtual teams is different from communicating to face-to-face groups due to the absence of non-verbal communication cues and the ability to use informal communication approaches (Newman et al., 2020). Communication tools and techniques serve as enhancers and supplements to leading a

virtual team. Virtual team communication is, to some extent, technological mediated; appropriate communication technologies as well as ways to use it are essential to successful team interaction (Hovde, 2014). The need for proper communication tools has increased especially during the aftermath of COVID-19, with an increase in the number of home-based workers (Feitosa & Salas, 2020). Using computer-mediated communication technologies is now ubiquitous in almost all workplace environments (Darics & Gatti, 2019). This section highlighted previous literature that focuses on communication tools and their influence on building relationships among team members.

Badrinarayanan and Arnett (2014) found that virtual teams are more effective than traditional working teams because communication technologies leverage the possibilities of overcoming the complexities of face-to-face interactions. An increasing number of organizations now invest in technologies that enable online collaboration with an aim to improve communication locally as well as globally (El-Tayeh et al., 2008). Newman et al. (2020b) revealed that specific communication tools and techniques are important in overcoming the challenges of leading virtual teams. The number of times a leader communicates to team members is important and has a positive impact on the team members because it leads to enhanced relationship development and increased virtual team effectiveness (Henderson et al., 2016).

Theories

Leadership styles are equally important when discussing the leadership role in assisting with relationship-building among team members. According to Iorio and Taylor (2015), transformational leadership is described as centered on managing the interpersonal relationships between people, while transactional leadership is focused on facilitating the execution of tasks in

the creation of products. Luring and Jonasson (2018) described transactional leadership as not appropriate for a team environment because it entails an exchange between leader and follower based on goal attainment control. Maduka et al. (2018) referenced Maslow's hierarchy of needs when comparing transactional leadership to transformational leadership. The authors suggest that transactional leaders are concerned with the basic levels of need of satisfaction, and they focused on the lower levels of hierarchy by stressing specific or significant task performance.

Transactional leadership, the authors continue, is not as effective because leadership by exception, reward or punishment would not produce the much-needed result in a virtual setting.

Transformational Leadership. Transformational leadership focuses more on building rapport among the team members, which impacts the team member's ability to work interdependently on goals and tasks. Cote (2017) suggested this form of leadership focuses on the need of the employees due to the times of uncertainty when employees need to be inspired and empowered. The author notes that leaders should inspire, energize, and intellectually stimulate the employees. Luring and Jonasson (2018) described this type of leadership as composed of (a) idealized charismatic influence, (b) inspirational motivation, (c) individualized consideration, and (d) intellectual stimulation. Anderson and Sun (2017) further described transformational leadership as important to team members being motivated, committed, and satisfied with their employment. Transformational leadership, as discussed by Aga et al. (2016), aids in improving team members' social relationships as well as clarifying the roles of each team member and interpersonal processes.

The authors further explained that role clarification does not segment the duties of each member but gives a better understanding of how each team member's role impacts the entire team. Interpersonal processes involve increasing teamwork skills, such as mutual supportiveness,

communication, and sharing of feelings. Leadership styles can also influence relationship-building among team members. Boies et al. (2015) argued that leaders will influence team members to trust one another indirectly by stimulating communication within the team. The authors discuss transformational leadership styles focusing on inspirational motivation and intellectual stimulation and how these two tools encourage communication among team members. The authors also revealed the expectation that leaders using inspirational motivation might lead to more strategic planning and work organization discussions; however, leaders using intellectual stimulation might have a more open debate, entertain various perspectives, and display free-flowing communications and ideas.

Also focused on leadership styles and the impact on virtual team effectiveness, Gross (2018) discusses the transformational, transactional, and laissez-faire styles of leadership. The author advises there is a sizable gap in the literature on leadership styles influence on virtual team member effectiveness. Laissez-faire leadership style does not usually apply in virtual teams and is therefore not applicable for this research. Effectiveness is a term used to describe members' acceptance, and quality of problem-solving methods and the solutions team members employ for work productivity (Gross, 2018). The author further identified the transformational leadership style as the leadership style that has a positive influence on the dimensions of the team's effectiveness because of the focus on the orientation of relationships within the team. However, the author describes transactional leadership and emphasizes the errors made by members when there are deviations from the original plan to achieve organizational goals. It can be imagined that transactional leadership could have a negative impact on relationships, especially if the focus is on recognizing mistakes. The research does not point to the

transactional style, rewarding the accomplishments; therefore, leading to a lack of cohesiveness among the team members.

Relational Leadership Theory. Relationship leadership theory consists of two contrasting but complementary lenses: the entitative and constructionist relational leadership perspectives, according to Uhl-Bien (2006). The entitative perspective takes leadership as a social object already formed in reality and conceptualizes social relations as individual-based perceptual or cognitive variables that help explain, control, or predict leader behavior and relational outcomes. Researchers have revealed from the entitative perspective, empathy is an essential ingredient to positive leadership outcomes (Cropanzano et al., 2017; Watkins et al., 2019). Jian (2021) suggested entitative leadership studies support a positive relationship between leaders' empathy traits or empathy displays with leaders' relational outcomes. However, how empathy works as relational leadership practice remains under theorized.

Leadership development is a topic of importance to organizations today, according to McCauley and Palus (2021). The authors discuss relational leadership as a component of organizational transformation, and critics of current leadership development practices claim they are too narrowly construed to yield meaningful results. Denis et al. (2012) posit leadership as a collective phenomenon that is distributed or shared among different people, potentially fluid, and constructed in interaction. Further identifying four streams of leadership, which are critical for collective or plural leadership. These streams are (a) shared leadership where members lead one another through mutual influence process; (b) constellation of leaders in hierarchy of the organization where the influence lies; (c) the distributed exercise of influence over time by a series of individuals, each of whom takes on and then hand off leadership responsibility to achieve an organizational outcome; and (d) relational leadership which is different from the other

three because it directly challenges the taken-for-granted notion that individuals (either alone or collectively) are the fundamental source of leadership. Relational leadership is seen as emergent property of relations which decenters individuals who are active participants in leadership, but not the “containers” of leadership (Denis et al., 2012).

Servant Leadership Theory. Servant leadership has surfaced as a fundamental concept that significantly contributes to determining employee behavior and articulating organizational values that facilitate organizational justice, corporate citizenship, and an individuals' performance at the workplace (Kumari et al., 2022). Servant leadership continues the authors, focus on promoting integrity and self-confidence, and it strives to bring out the employees' full potential. Van Dierendonck (2011) suggested that servant leaders are distinguished from other leadership concepts by serving others as a priority and understanding the needs and interests of others. Walumbwa et al. (2010) furthered the discussion of servant leaders by adding they follow inspire and motivate. Servant leadership theory is suitable for innovative organizations devoted to nurturing their followers' creative potentials (Williams et al., 2017).

Williams et al. (2017) examined the relationship between servant leadership and employee creativity to fill the gap of insufficient empirical studies the servant leadership construct. The goal of their study was to investigate the impact of the combination of servant leadership and political skill and to conceptualize the impact of politically skilled servant leaders on workplace spirituality. The findings of their research suggest servant leaders have a greater impact on their employees' perceptions of workplace spirituality when they also demonstrate high levels of political skills. Concluding that the existence of this environment promotes meaningful work while embracing the employee's inner life and sense of community, servant leaders also enhance their follower's creative efforts (Williams et al., 2017).

Servant leadership, as described by Reslan et al. (2021), encourages leaders to create a balance between leading and serving others. The study performed by the authors focused on the effect servant leadership has on innovative work behavior (IWB) and employee knowledge sharing behavior (KSB). The authors suggest there was a gap in research that explains the mingling of job autonomy (JA), providing direction and if it stimulates employees and strengthens the relationships and have a positive impact on relationships between servant leaders and employee's willingness to share knowledge. Janssen (2000) described IWB as a multi-stage process that generates and implements novel ideas to enhance the effectiveness of employees, groups and/or the organization to gain sustainable advantages and to survive in a challenging environment. The ability to advance toward an employee-centered leadership has a considerable effect on employees' IWB and facilitates organizational innovation, a motivated work environment, as well as favorable performance of the organization.

Williams et al. (2017) discussed three characteristics of servant leadership. The first characteristic suggests servant leader's highest priority is to service others, both inside and outside the organization. The servant perspective does not stop when the leader finished his/her workday, leaders have a desire to serve (Graham, 1991). Second, the servant leaders' primary focus is on the follower (Williams et al., 2017) with interest in the continual growth and development of the follower. The authors described the third characteristic of servant leaders as their incorporation of a moral component by concluding that the servant leader works to treat everyone the same avoiding inconsistencies in how the employees are treated. Enhancing these characteristics of the servant leader, the authors suggest that if the leader possesses political skills this is also a benefit. The political skills, the authors suggest, gives the servant leader a level of social astuteness with an understanding of the organizational and social context as well

as the networking abilities allowing for development of relationships with diverse organizational actors.

Constructs

The constructs identified in this research are communication and collaboration, and shared leadership. Communication is among the major factors leading to high-quality relationship building in virtual teams (Castellano et al., 2021). Virtual teams require adequate sharing of knowledge with team members to effectively collaborate (Alsharo et al., 2017). The authors further suggest that because virtual teams are distributed among different geographical locations, any communication and collaboration must be mediated by technology. Shared leadership, according to Singh et al. (2019), is a dynamic, interactive influencing process among peers, with the objective of achieving personal, team, and/or organizational goals. Eseryel et al. (2021) suggested that shared leadership has a clear impact on team performance, which is an element of team success. This section addresses existing literature pertaining to these constructs and will include previous literature that evaluates the impact on relationship building in virtual teams.

Communication and Collaboration. Communication, according to Stratone and Vatamanescu (2019), is very important, no matter the kind of relationship. Communication can be seen as a way of exchanging ideas, attitudes, values, opinions, and facts. Zhang et al. (2022) stated advanced information technology has made it possible for virtual teams to complete tasks collaboratively yet remotely and it allows organizations to meet the requirements of flexibility in a globally competitive market. Communication is often depicted as a key predictor of virtual team effectiveness, according to Darics and Gatti (2019). The popularity of the digitally mediated communication platforms and the collaboration that they enable brings fundamental

questions about teamwork and communication in how virtuality affects interaction and consequently the effectiveness of a team.

Liao (2017) suggested in terms of leader influence on virtual collaboration, both task and relationship-oriented behaviors are critical and ultimately attributes directly to team performance. The author submitted that leader task-oriented behaviors, such as coaching, enhance communication thought and collaboration. Cole et al. (2019) defined collaboration as a process of social interaction, where one's ability to influence the emotional climate and behavior of others can strongly influence performance outcome. The authors also suggest collaboration is an essential factor in leveraging team effectiveness, and organizations are looking for strategies to increase collaboration among their teams.

Poor communication is an important factor hindering the successful operation of virtual teams (Zhang et al., 2022). However, according to the authors, if team members can achieve a state of being familiar with each other's work requests and expectations and can understand each other without saying much, the operational efficiency of virtual teams is likely to improve. Hill and Bartol (2018) expressed in their writing specific behaviors for effective communication.

Leadership is important in a virtual team as compared to a collocated team. Strong leadership abilities must be exhibited to manage a dynamic environment (Mukherjee & Natrajan, 2017). The authors suggest social media tools, such as Facebook, have become a very popular tool for business enhancements; thus, creating a strong medium of internal communication coordination in the organization. One way to communicate using Facebook is to create a group or subgroup with the team and to allow for posting updates and information by the team members to allow for communication exchange, suggests the authors. Blogs are also discussed by Mukherjee and Natrajan (2017), as a medium of communication to announce major

milestones and motivate team members by recognizing their contribution in achieving those milestones. Google Plus is another tool, suggested by the authors as a social media tool to assist in communication and collaboration between virtual team members. The authors provide this tool has features that allow face-to-face chats and simultaneous update on google documents. The result of the research performed by Mukherjee and Natrajan (2017) was the use of social media can overcome the challenges of a virtual team, such as team dynamics, team diversity, and social dimensions among team members.

In their research, Cole et al. (2019) focused on the connection between emotional intelligence and strong collaboration among team members. Emotional intelligence is defined as a set of emotion-processing-abilities that lead to improved social interactions. The authors focused on four abilities of emotional intelligence (a) awareness of emotions (own and others), (b) management of emotions (own and others), (c) emotional understanding, and (d) emotional facilitation (generation of emotions). The authors further focused on the awareness of the team members' use of emotional intelligence to manage emotions, both theirs and others. In virtual teams, where there is little face-to-face interaction, the interactions must always be successful, suggest the authors. The authors further concluded there is a high correlation between emotional intelligence and collaborations. Further stating that team members high in emotional intelligence are likely to contribute to the overall emotional intelligence of the team, recognize their roles in the team structure, are more prone to empathetic behavior, form strong relationships, and enable a cohesive support system in and among themselves.

Trust plays a critical role in team collaboration, especially when the teams are multi-national, virtual, and has a goal of effectiveness and efficiency within the organization (Cheng et al., 2021). Kiesler et al. (1984) compared virtual team communication to face-to-face

communication, where members receive limited context and environmental cues in a computer-mediated collaborative environment. The lack of context cues and co-location can limit the sharing of expectations, similarities, and other information (Srivastava & Chandra, 2018). Trust at the individual level depicts the trust in one's own intentions and behaviors (Cheng et al., 2021). The authors continued by suggesting trust-at the group level-depends on the positive view of others' intentions and behaviors, which represents the individuals' awareness of other group members.

Characteristics of collaboration include inclusion, integration, compromise, and open communication (Hattori & Lapidus, 2004). For continuous organizational growth, a level of technical competence, a nurturing climate, management commitment, and collaborative relationships requiring an extraordinary degree of trust among team members continues the authors. Further stating when a team member avoids confrontation, this is known as trust, but collaboration is present when a team member shows up on time for a meeting and listens well to what is being discussed. Fostering good relationships among team members promotes a collaborative context and work climate within a virtual team, leaders in such teams need to ensure that all members understand, appreciate, and leverage diversity to establish trusting relationships (Liao, 2017).

Shared Leadership. Shared leadership encourages individuals to step forward to lead others or step back for others to lead (Castellano et al., 2021). Shared leadership, according to the authors, involves the distribution of leadership among individuals on the virtual team. These individuals must assume the role of influencer (the leader) or influenced (the follower) due to the nature of the task or responsibility (Castellano et al., 2021). The authors continued by suggesting

the impact of shared leadership enhances the performance, effectiveness, and social and intellectual capital of the team.

Singh et al. (2019) suggested that shared leadership arises from willingness of a leader to pass on the leadership authority and power to the team members. The research, performed by the authors, provides that shared leadership is referred to as a cooperative communal process where leadership is performed by the team in setting organizational goals, priorities, and tasks. This form of leadership, the authors suggested, favors collective decision-making generating strategic outcomes, also linking this type of leadership to small and medium-size enterprises. The conclusion of the research indicates that shared leadership has influences on organizations' market-oriented culture, innovation, and overall performance.

Shared leadership makes teams more productive, adaptive, and creative in what recent research has been based on, according to Evans et al. (2021). Which, continued the authors, is encouragement for organizational leadership to develop a shared leadership structure? The authors take their research in another direction which focuses on how shared leadership structure can have harmful and unintended consequences for individuals.

Virtual Team Member's Relationships

In the research conducted by Tran et al. (2016), the team discussed the increasing popularity of virtual teams and the reluctance and unwillingness of team members to cooperate in a virtual team setting. The authors evaluated how the team and individual characteristics affect cooperation and the team atmosphere, making relationship-building difficult. The authors also suggested that cooperating among team members is vital for implementing and developing organizational goals by sharing information and adapting to multi-country and multi-cultural contexts. In the meta-analysis conducted by Breuer et al. (2016), the authors explored the

relationship between team trust and team effectiveness. The authors further suggested team trust has a direct impact on team performance. The authors identified trust as one of the main challenges for virtual teams. Without trust, there is no relationship, and without a relationship, the impact on the effectiveness of the team's performance is limited.

Based on previous research, Breuer et al. (2016) defined team trust as the shared willingness of the team members to be vulnerable to the actions of the other team members based on the shared expectations that the other team members based on the shared expectations that the other team member will perform particular actions that are important to the team, irrespective of the ability to monitor or control the other team members. Team members that have trust between members open themselves up to a level of vulnerability with others' actions in the team. Leadership must engage in activities that will build trust among the team members to foster relationship-building and positively impact organizational success. Breuer et al. (2016) stated team trust facilitates specific risk-taking behaviors as reducing defensive control, open discussion of conflicts and mistakes, mutual feedback, and sharing of confidential information, which in turn should lead to more efficient coordination of team members' resources to the team task. The authors further reveal that trust should be stronger when the risks are higher. Electronic communication increases the level of risk; therefore, creating a need for trust among the members.

According to Alsharo et al. (2017), virtual team members are unable to observe physical behaviors that traditional face-to-face team members rely upon to establish and sustain trust. Virtual team members are reliant upon different behaviors, unique to virtual settings, to assess trustworthiness, and compensate for the lack of physically observed behaviors. Breuer et al. (2020) described trust as a key success factor that ensures effective collaboration among team

members and ultimately predictive for the results of the organization. Furthering the importance of trust, the authors suggested that three characteristics should be explored to determine a team member's trustworthiness. These characteristics are ability or competencies and skills, benevolence, or the belief there is no reason for profit or personal motive, and integrity meaning the team member has values and principles that are acceptable to the other team members.

Influential team leaders make sure they attend to the mechanics of the team's work and attend to the human needs of individual employees by encouraging motivated behavior and the self-efficacy needed to persist on challenging tasks (Ford et al., 2017). The authors further suggested that trust is essential to the success of a virtual team. These authors focus on building a productive virtual team and focusing on three areas, to include: organizational, leadership, and team strategies. Ultimately, the author's research indicated that trust is critical to accomplish the strategic goals for any of these entities. Trust is necessary, most importantly, for building relationships among the team members.

While all successful managers must ensure that they have provided the basic organizational support for their employees, especially effective leaders also ensure they build trustworthy relationships. The authors focused on two levels of trust, to include: swift trust and lasting trust. Swift trust is developed early in the creation of the team. This type of trust is formed before there is knowledge of each other and before there has been an opportunity to work together on the task or as team members. Swift trust can be considered fragile because there is no history attached to the relationship; therefore, as fast as it is formed, one misunderstanding can forever sever this type of relationship among team members.

Zakaria and Yusof (2020) attempted to advance the understanding of swift trust and how it is formed among global virtual teams by performing a qualitative study of how this form of

trust results in a team's impact on organizational success. De Laat (2005) suggested because the conditions for establishing trust depend on factors, such as social setting, generational similarity, identity, race, and gender, this can be particularly challenging for virtual teams, for which cultural diversity and lack of face-to-face contact are the norm. Swift trust is not based on building interpersonal relationships and can be expressed as a more social form of trust (Zakaria & Yusof, 2020). It is a trust formed when a group of people has a common goal or accomplishment that needs to be achieved. Therefore, swift trust will be most recognized in temporary teams, teams that have been constructed by appointing people with diverse skills that fill a particular need to achieve the goals. The authors discussed how one's culture can affect a team members ability to form swift trust with others by suggesting the team members need to be aware of their cultural habits and how these cultures impact their ability to communicate with team members from afar and achieve goals in a short period of time (Zakaria & Yusof, 2020).

Ford et al. (2017) suggested the organization, the leader, and individual team members must invent ways to be transparent with each other to build and sustain trust. The authors continued the discussion by noting that some members will develop swift trust for other virtual team members because of their personality. Swift trust has cognitive processes that emphasize belief in the other party's capability, reliability, and dependability (Crisp & Jarvenpaa, 2013). The authors further suggested swift trust becomes critical in ad-hoc virtual teams where there is not sufficient time to expend on time-consuming interpersonal relationship building. Rather than attempts to influence others' feelings and affective attachments to build resilient interpersonal relationships, trust is based on an early presumption that the team is trustworthy but verified through actions around joint task, scheduling, and monitoring. It is critical for a virtual team to have high early trusting beliefs because such beliefs help the team engage in normative actions

that make trusting beliefs resilient and positively impact final performance. Ford et al. (2017) offered a final summation by stating trust is the glue that holds virtual teams together.

Cohesiveness refers to individual members' being attracted to the team or a team's tendency to remain unified (Hahm, 2017). Cohesiveness tends to increase peoples' volition to help or support their coworkers. The author stated virtual teams can lack cohesiveness. Members of a virtual team do not come into direct face-to-face contact. As a result, when compared to traditional teams, it is more difficult to have deep and close relationships among virtual team members. According to the author, this shallow relationship between members can certainly reduce team identification and cohesiveness. Consequently, information sharing within a virtual team may become more difficult. The author performed an empirical analysis of authentic leadership, teams, and members, focusing on the practices and procedures that lead to team members' cohesiveness. Tan et al. (2019) revealed that leaders can have effects on team cohesion that impact the relationship-building process among team members and, ultimately, the overall team performance.

Morgan et al. (2014) performed an exploration between communication and team effectiveness within the context of global virtual teams, arguing that a range of communication methods may impact the team's effectiveness within their organization. With the added complexity of international teams over face-to-face teams, the authors examined the communication methods among virtual team members and the effects on organizational success. The authors mentioned that technology is often used as communication tools, including teleconferencing, video conferencing, and electronic mail. With this technology, the virtual team is expected to deliver results that are comparable to co-located teams. Also noted, there are often no face-to-face contact and meetings, at best, maybe intermittent.

The challenge of virtual team communication versus co-located is that there is no opportunity to evaluate body language, facial expressions, hand gestures, or behavior during dialogue exchange. Morgan et al. (2014) stated that proper communication aids in relationship-building and developing trust. The authors suggested the team leader's responsibility to ensure the team members are correctly communicating and forming relationships among the members. The leader must set the standard, expectations, and communication framework.

Communication is a topic discussed in the research performed by Kuscu and Arslan (2016), where it is revealed that 33% of subjects involved in their research thought that poor communication was one of the largest challenges for virtual team leaders. The research focused on virtual leadership, but the focus was vastly different from other research. The authors used two examples of virtual leadership; one from the business environment with team members located in various regions of the world, possibly different time zones, spoke multiple languages, and came from different cultures. The other focus of the inquiry was from distance education teams, where the professor was the virtual leader, and the students were considered team members. The intriguing part of this research focused on the similarities of the leadership attributes required in both situations. In both cases, the authors pointed out that team members use technical information and communication devices such as (a) mobile phones, (b) text messages, and (c) electronic learning modules.

In other words, Kuscu and Arslan (2016) in both situations used information and technology to overcome distances. The authors discussed the advantages of having diversity among individuals but carefully explain the importance of well-established communication to have success. The authors discuss the challenges of communication on virtual teams when compared to face-to-face teams. Alsharo et al. (2017) supported this by stating that team

members must establish open communication and effectively share knowledge among virtual teams to collaborate effectively. These challenges can be the presence of unspoken communication. When team members are face-to-face, certain body language, gestures, hand movements, and mimics can be examined. This is not possible in virtual team settings, and because of this, the communication is sometimes misinterpreted by the leader, and the wrong impression is gathered about the team member. A good virtual team leader must continuously keep his communication channels open and give confidence to his employees (Kuscu & Arslan, 2016).

Leadership Tools for Virtual Teams

Advances in communication and information technology have created new opportunities for organizations to build and manage virtual teams (Kirkman et al., 2004). The authors have evaluated the effect that face-to-face meetings have had on virtual team performance and empowerment. In this research, the authors have noted previous studies have implied that teams are either virtual or co-located. This has proven not to be accurate based on the findings of the authors. Virtual teams' meetings periodically enhance empowerment and team effectiveness in the organization. Teams that are not cohesive and do not possess the empowerment that leads to organizational success could have distrust and information hoarding, unwillingness to take risks and learn from mistakes, and even inaction and paralysis (Kirkman et al., 2004). The authors also suggested that a collective sense of empowerment is particularly important for virtual teams that meet infrequently. Kirkman et al. (2004) revealed that highly empowered virtual teams were associated with significantly higher levels of process improvement and customer satisfaction than less empowered teams. The authors suggested that leaders should bring virtual teams together for periodic face-to-face meetings to enhance process improvement.

Fernandez and Jawadi (2015) wrote about virtual R&D project teams and the importance of high-quality relationship-building. The authors examined the effects of leadership, work organization, and communication practices on the quality of the relationship between team members. The authors noted the importance of using technology to enhance relationship-building among the team members. It is stressed that the performance of R&D activities can be performed without the team members being collocated; however, the use of information and communication technologies (ICT) must be used for interaction, information exchanges, and brainstorming sessions. Fernandez and Jawadi (2015) suggested that heavy reliance on ICT, the distance separating team members, cultural differences, and lack of information about team members are just some of the factors that can inhibit the development of high-quality relationships characterized by trust and cooperation in such teams. Technology is an important aspect of virtual project teams as team members use it to (a) coordinate and execute team activities, (b) transfer information and feedback, and (c) virtual interaction (Dube & Marnewick, 2016).

Zakaria and Yusof (2020) mentioned the impact of swift trust among virtual teams and face-to-face teams. This research also referred to the use of technology in developing swift trust within virtual teams. The authors showed that a high level of interconnectedness by the internet often facilitated the ability to collaborate across vast geographic distances and connect many people at one time. Those involved in the study named five tools that were used to enhance virtual collaboration. These tools included (a) ability to communicate via various forms of social media, (b) ability to share files via Google drive and other forms of document sharing, (c) using Zoom for real-time discussions, and (d) using calendar-sharing tools to schedule and coordinate meetings. Other types of proprietary software, such as Microsoft Office, were utilized for creating formal proposals and presentations. According to Zakaria and Yusof (2020), the use of

technology and collaborative tools enabled the virtual teams to communicate more effectively and regularly than they would have done if they were working face-to-face and that this connectivity between team members helped them get to know each other and build trust more quickly.

Team Performance

Organizations have adopted virtual teams to gain a competitive advantage in the global economy (Su et al., 2014). Virtual team performance must be evaluated somewhat differently from face-to-face teams because the tools used to accommodate how the team works together are different. Tan et al. (2019) stated five factors were the basis of the study identifying their impact on the virtual team's performance. These five factors are (a) relationship- building, (b) cohesion, (c) trust, (d) communication, and (e) coordination. These factors are suggested not to be the same for face-to-face groups and will impact them differently, not necessarily affecting the team's performance. Being a team leader means taking the time to learn the individual members of the team, what motivates them and the similarities and differences among them (Stratone & Vatamanescu, 2019). The authors suggest doing this will have the biggest impact on the virtual team and its success or failure in the organization. Relationship-building, for the sake of this research, is recognized as one of the major obstacles to overcome when using computer-mediated communication due to lack of personal interaction (Tan et al., 2019).

The authors displayed the importance of having strong relationships among team members for each member to feel comfortable sharing information with other team members. Also, relationship-building must be present from the onset of virtual team development to allow time to develop information exchange modes. Virtual teams provide advantages for team members including encouraging work/life balance, decreased travel time, reducing stress at

work, decreasing the use of sick leave and increased employee satisfaction, which maximizes employee recruiting and retention strategies (Green & Roberts, 2010). According to Zakaria and Yusof (2020), effective management of a virtual team is difficult because it is often limited to the same best practices used for traditional teams. Managing virtual teams, as suggested by Elyousfi et al. (2021), is distinct and demands more coordination than face-to-face teams. The authors continued by suggesting that virtual teams are often impacted by poor feedback, lack of emotions, and lack of visual and audio communication, resulting in less efficiency in job performance.

The role of leaders is increased to ensure employee engagement and accountability, retain employee productivity, and cope with decreased face-to-face interpersonal contact, which results in feelings of isolation. The authors further suggested that e-leadership is an area of focus, describing how leadership must overcome the challenges that coincide with virtual teams. Further highlighting that virtual team leadership must learn to master three characteristics (a) leader's trust, (b) leader collaboration, and (c) leader behavior. These characteristics, suggested the authors, have a direct correlation to virtual team performance. Turesky et al. (2020) viewed agrees with these leadership characteristics suggesting that the association between trust and team performance may be reciprocal, not to be misinterpreted as the same as the social bonds in traditional, in-person teams. Trust, according to the authors, is the foundation of performance.

Organizational Support for Virtual Teams

Organizations utilize virtual teams to gather experts to collaborate online to accomplish organizational tasks (Alsharo et al., 2017). The authors continued by stating organizations assemble virtual teams of knowledgeable and skilled individuals who are expected to utilize their knowledge to perform organizational tasks. Drouin et al. (2010) suggested virtual teams have

particularly strategic advantages. For instance, they are staffed based on members' expertise instead of their local availability. Virtual teams can also work around the clock by having team members in different time zones, increasing the speed and flexibility with which they can respond to market demands. Organizational support is considered to be an area that has a strong impact on the virtual team's success.

The author pointed out that top management supports virtual teams by means of human resources (HR), resource allocation, coordination, and communication support systems. These support systems facilitate project coordination and monitoring, information exchange and access, trust building, and cohesion between team members. The authors further suggested training enables individuals to acquire the required knowledge, skills, and competencies to work in distance mode. The authors deemed organizational support as an area that substantially impacts the team's success and the tasks the team must accomplish. However, Drouin et al. (2010) concluded organizational support is only one tool among many that can be applied to ensure the smooth functioning of virtual teams.

Businesses and organizations aim to reach higher levels of performance, therefore focusing more on creating high functioning groups (Stratone & Vatamanescu, 2019). The team leader should pay attention to things that work within the team so he/she can identify the risk and prevent them, if possible, by building relationships among team members, continued the authors. The goal was to maintain the team members without a high rate of turnover and reducing the constant changes in team dynamics with a lack of shared history which can create difficulties in assigning responsibilities, planning for team development, and locating expertise (Stratone & Vatamanescu, 2019).

Related Studies

Virtual team members are made up of individuals from different genders, experiences, cultures, and geographic locations (Batirlik et al., 2022). The authors continued by identifying leadership as needed for both face-to-face teams, as well as virtual, but suggesting virtual team leadership performs its function through information and communication technologies, unlike traditional teams. In their writings, the authors discussed the leadership behaviors that are beneficial to the success of virtual teams. These behaviors are task-oriented leader behavior and relationship-oriented leadership behavior. While task-oriented behaviors, as described by the authors, relates to determining the roles and responsibilities of the leader and team member. Relationship-oriented approach emphasizes maintaining good relations among subordinates, employees, and team members.

Research has demonstrated that leaders can make a critical difference to team performance and effectiveness (Morgeson, 2005). Hambley et al. (2007) suggested that leadership appears to be an integral part of effective teamwork. However, many challenges associated with the leadership coordination and control of virtual teams (Carlson et al., 2017; Ford et al., 2017) are met in virtual teams due to the low level of face-to-face relationships as compared to conventional teams. Therefore, the effectiveness of virtual teams seems to be a more complex phenomenon, due to the lack of face-to-face communication in the virtual relationships of team members and leaders (Mysirlaki & Paraskeva, 2020). The coronavirus (COVID-19) crisis in 2020 urged many companies around the world to ask their employees to work from home, suddenly increasing the number of virtual teams and requiring leadership to shift from face time leadership to virtual leadership, creating challenges for both leaders and organizations. Mysirlaki and Paraskeva's (2020) writings focused on the leadership

characteristics that were crucial for virtual team settings. One of the characteristics was transformational leadership.

Transformational leadership is thought to be an important aspect of leadership in virtual teams (Mysirlaki & Paraskeva, 2020). Transformational leadership is a process by means of which a change or transformation occurs in individuals or organizations, and it has been “the single most studied and debated idea with the field of leadership” (Diaz-Saenz, 2011, p. 299). Mittal and Dhar (2015) suggested that transformational leadership style is responsible for taking the field of leadership from the point of extinction to a flourishing area in current research. Transformational leaders are those who can successfully transform the focus of their followers from instant self-interests to an isolated collective vision and inspire them to perform beyond their duties. The authors identified characteristics of transformational leaders as high moral standards and values, adhere to ethical code of conduct, and provide vision and mission to their followers. Mittal and Dhar (2015) concluded the focus of their study is the role leaders play, through transformational leadership style, in influencing employee’s creativity and ability to influence organizational success, not only for the individual but also for the entire team.

Relational leadership theory has received a great deal of theoretical and empirical attention in many domains of organizational behavior (Fitzsimons et al., 2016). The authors focused on a type of relational theory, transactive goal dynamics (TGD), which relates to relationships between individuals and teams with an impact on achieving goals. In their writings, Nicholson and Kurucz (2019) suggested it provides a way of envisioning leadership as a social influence process through which coordination and change emerge, and in primacy is placed on social processes of co-construction, rather than on the individual’s involved.

Pauleen and Yoong (2001) suggested the development of personal relationships between team members is recognized as an important factor in enhancing effective working relationships among members of both co-located and virtual teams. However, little has been written on how to build these online relationships among virtual team members. Virtual teams, also known as a geographically dispersed team, is slightly different from a conventional team because it is a team formed through collection of individuals who are independent in their tasks but share the responsibility for outcomes (Pangil & Chan, 2014). The authors continued suggesting virtual teams are co-workers from a variety of organizational departments or business units who use advanced information and communication technology to achieve a common purpose or goal. These workers are often dispersed across space, time, and organizational boundaries.

Anticipated and Discovered Themes

Themes are at the heart of any qualitative research approach (Mishra & Dey, 2022). The authors continued by expressing that themes cannot be observed as they are perceptions, experiences, feelings, values, and emotions residing in the minds of participants/respondents. Because the themes are invisible perceptions and experiences embedded in the minds of respondents, the researcher must ask questions, and this can be accomplished by in-depth interviews or focus group discussions.

Studies that span over 60 years ago have shown that social interactions within work teams have significant effects on worker productivity (Hart & Mcleod, 2003). Most of this research was based on face-to-face interaction and not interaction in a virtual setting. The authors continued to reveal that most of the current knowledge about leadership and close personal work relationships is built on work in face-to-face settings, therefore leaving a gap in research on the role of leadership in the virtual settings. This research filled the gap by examining virtual teams

in the Charlotte, NC metropolitan area and focusing on leadership's role in ensuring relationships are built among virtual team members. The expectation of the outcome of this research was to show the important role that leadership plays in building relationships among virtual team members. Also, there were no expectations that any established process exists for developing and building relationships among virtual team members.

Discovered Themes

The process of performing the research resulted in the emergence of various themes. These themes also aligned with the literature review. The analysis of the research revealed the emergence of three themes. Theme One - The need for collaboration among virtual team members. Leaders must establish opportunities for virtual team members to collaborate. For this reason, the leader must understand the potential barriers for ongoing collaboration. In the literature review extensive discussion of barriers that make it difficult for team members to build trust and feel comfortable with collaborating with each other. Theme Two – The need of sufficient tools for communication. Key for virtual teams success is their ability to communicate and in order to communicate, the leader must ensure the team members have the proper tools. No longer does having only electronic mail (e-mail) suffice for communication among virtual team members. The research has shown good communication tools, such as texting, instant messaging tools, and video conferencing are necessary for the virtual team to be successful. Leadership has to ensure the team members have various forms of communication and are equipped to properly utilize these tools. Theme Three - The importance of face-to-face interaction to build relationships. The research analysis confirms the importance of team members having face-to-face interaction to build relationships. The team leader has to create the opportunity for the team members to meet face-to-face. It is up to the leader to determine how often the team meet due to

team members locations and the costs associated with getting everyone in one location at the same time. However, the research has shown that even if it is once per year, relationships can develop among the team members. Many leaders, according to the research, use the face-to-face meeting as an opportunity for training and team building. These themes filled a significant gap in the previous research and helped to focus on three important areas that leadership must utilize to ensure relationships are built among virtual team members.

Summary of the Literature Review.

The effectiveness of virtual teams depends on various factors, including team members' relations and trust (Velez-Calle et al., 2020). Team leadership plays a critical role in many organizations (Liao, 2017). The purpose of a leader is essential to develop a strong team that will enhance the organization's performance. It is also the leader's responsibility to establish a cohesive unit. When the team exists virtually, some challenges are present that require a different leadership approach. There should be collaboration and relationships developed within the virtual team that will enhance the team's performance and the organization. As commented by Lauring and Jonasson (2018), although the number of global virtual teams has been growing rapidly, it is still a great challenge to achieve internal collaboration across geographic, cultural, and linguistic barriers.

Although a growing body of virtual team literature is emerging, there are few studies assessing the role of leadership in virtual teams (Davis & Bryant, 2003). Drouin et al. (2010) revealed there are few studies that have examined the organizational support given to virtual project teams. While there has been varied research on the roles and the responsibilities of the leader in developing the team and ensuring the performance meets the organizational expectations, there has been little focus on the leader's responsibility for establishing

relationships among these virtual team members. This research focuses on leadership's role in building relationships among virtual team members. The previous literature published regarding the team leader's role will be discussed in detail to reveal the findings of earlier researchers regarding virtual team leadership. To facilitate relationship building, leaders should focus on providing on-time feedback, clarification of the team roles, the implementation of a consistent leadership style, and building cohesion and trust (Zakaria & Yusof, 2020).

Summary of Section 1 and Transition

Leadership responsibilities within an organization introduce a lot of challenges for the one holding the title. However, with the addition of team members not existing in the same building, this poses more challenges. The leader will have to support and direct the team members in a manner that will help to achieve the goals and strategies of the organization. These virtual teams can exist in different locations that could span over the entire globe. This leads to differences in the native language, cultures, time zone, and other things that could make it difficult for leadership to achieve the desired organizational goals. The problem with leading a virtual team versus a face-to-face team is the difficulty in developing relationships among the team members. Relationship development forms naturally when the team is face-to-face; however, virtual teams cannot grow these relationships organically. This leads to the team leader having the responsibility to foster these relationships among the team members. The problem is the failure of leadership to aid in this relationship building. Research addresses there has been little focus on this problem and few solutions for leaders to overcome this issue. This section has focused on identifying the problem and suggesting a qualitative study to highlight the methods and tools used by leadership to foster relationships among virtual team members.

Section 2: The Project

There is very little available research to understand the process and behavior that a leader needs to lead a virtual team (Liao, 2017). Leadership has many functions, and these functions have changed over the last decade with the growth in popularity of virtual teams. Managing virtual teams could be challenging and need to be done in appropriate ways (Elyousfi et al., 2021). This study sought to understand the role of leadership in aiding in the development of relationships among team members. The researcher used a qualitative case study approach seeking companies that use virtual teams. The researcher used this approach to explore the role of leadership in building relationships among team members not located in the same structure.

The research participants consisted of team leaders to analyze the level of relationships present among the team members. Also, to evaluate how leadership aids those relationships by offering opportunities for members to develop relationships within the team further. Interesting to consider were leadership tools and practices to ensure strong relationships are formed among the virtual team members. Questionnaires and interviews were used to collect the data. Once the data were collected, the data were analyzed and processed to show if leadership plays a role in building relationships among the team members and, ultimately, the impact on organizational success. A successful virtual team will help industries to reduce their costs and increase performance and benefits (Lin & Roan, 2022).

Purpose Statement

The purpose of this qualitative (flexible) multiple case study was to highlight the methods and tools used by leadership to foster relationships among virtual team members. The more significant problem was explored through in-depth research of leadership's failure to encourage

relationship-building among team members and its impact on companies' organizational success within the Charlotte, North Carolina, metropolitan area.

Role of the Researcher

Qualitative research is sometimes defined as interpretive research (Sanjari et al., 2014). According to Lin and Roan (2022), in comparison with quantitative methods, the qualitative method is a more subjective method. Qualitative researchers collect data themselves through examining documents, observing behavior, or interviewing participants (Creswell, 2014). In qualitative research, the researcher is the research instrument, directly impacting data collection and analysis (Geddis-Regan et al., 2021). The researcher's role differs between the different research traditions in processes, planning, interviews, and attitude during interviews (Sorsa et al., 2015). In this research process, the researcher used various methods for contacting potential participants. One mode of contact was to communicate with the organizations by letter. A list of organizations within the Charlotte, NC metropolitan region was compiled. From this list, the researcher made contact to obtain the correct person to send a letter of request to participate. The second recruitment approach was contacting professional organizations for information on associated businesses in the Charlotte, NC metropolitan area. The organizations included but were not limited to International Leadership Association, located in Silver Springs, MD.; America Society of Association Executives (ASAE; Leadership Division), Washington, DC; and American Leadership Development Association (ALDA).

There are many roles fulfilled by the researcher in the qualitative research study. Although not often thought of in this manner, the researcher is a critical instrument in qualitative research (Creswell, 2014). Surmiak (2018) suggested the researcher, performing research and gathering data, may be exposed to confidential information from the study participants. One way

to protect them (and the other participants) is by maintaining confidentiality. This is the one role of the researcher as an instrument for the study.

Qualitative researchers seek to understand the phenomenal world through the study of events, actions, talks, and interactions, suggests Barrett (2007). This understanding helps to translate and prepare the findings to support the purpose of the study. The interchange provided by the qualitative approach interview opens for the researcher a wide range of possibilities to investigate the horizons of the investigated, seeking to understand their points of view (Cheron et al., 2022). According to Lefkowich (2019), researchers have a significant role in co-constructing data. The author continues by suggesting the researcher's role ranges from designing the scope of the study and deciding on interview questions to introducing key language and unspoken norms. In qualitative research, the researcher is considered a research instrument. According to Xu and Storr (2012), the ability to observe mundane details, conduct in-depth interviews, and reflect on the meaning of observation and interview data is all essential to success.

Actions of the Researcher

As defined by Creswell (2014), qualitative research is an approach for exploring and understanding the meaning of individuals or groups ascribe to a social or human problem. Azungah (2018) identified the qualitative researcher as one who regards the world as complex, dynamic, interdependent, textured, nuanced unpredictable and understood through stories and experiences. Qualitative research is heavily focused on researcher's interpretations upon the phenomena under investigation (Bispo & Gherardi, 2019). The researcher's interpretative capacity drawing on perception, judgments, and affects is relevant to meaning making upon subjective organizational phenomena involved in a complex web of actions. A qualitative researcher discerns individual experiences and pervasive trends using investigation methods that

cannot always be analyzed using statistical techniques (Hewitt, 2007). The research itself will explore the problem; however, the researcher's role is to ensure the investigation is in-depth enough to give an adequate explanation and perhaps a solution to the problem. The primary responsibility of the researcher is to safeguard participants and their data (Sutton & Austin, 2015). Mechanisms for such safeguarding must be clearly articulated to participants and must be approved by a relevant research ethic review board before the research begins.

Bracketing

Bracketing typically refers to an investigator's identification of vested interests, personal experiences, cultural factors, assumptions, and hunches that could influence how he or she views the study's data (Fischer, 2009). Gregory (2019) referred to bracketing as the notion of setting aside prior to understanding any social reality in question. The author continues by suggesting emotional detachment, whether expressed as disciplinary jargon or taken from a theoretical model, sets boundaries for the researcher. Dörfler and Stierand (2021) suggested that bracketing can be conceptualized as the researchers' attempt to hold in abeyance their pre-understandings and assumptions to attain experiences before making sense of them. The authors further defined bracketing as a core concept in phenomenological theory but can be highly controversial.

Dörfler and Stierand (2021) continued to explain the reason for this is that phenomenology has provided theoretical grounding for interpretivists as well as positivists, and bracketing means very different things depending on which philosophical underpinnings are adopted. Bracketing is a method used in qualitative research to mitigate the potentially deleterious effects of unacknowledged preconceptions related to the research and thereby to increase the rigor of the project (Tufford & Newman, 2010). The authors continued by suggesting that bracketing is also a method to protect the researcher from the cumulative effects

of examining what may be emotionally challenging material. While bracketing can mitigate adverse effects of the research endeavor, importantly it also facilitates the researcher reaching deeper levels of reflections across all stages of qualitative research.

Researchers are connected with the participants' descriptions of their 'lifeworlds,' focusing on certain phenomena (Sorsa et al., 2015). If bracketing is not used during research, the risk is that data will be biased and more a reflection of the worldview of the researcher, rather than that of the participant (Sorsa et al., 2015). Getting the correct data and performing the proper research is a part of the researcher's responsibilities. Bracketing can get the researcher close to the phenomenal essence of lived experience (Olekanma et al., 2022). Hurd et al. (2019) described the process as often characterized by disorder but adds that the requirements to adhere to a tightly defined methodology and produce timely research outputs often lead the authors to present the findings as though research has been the product of a linear process. Bracketing as described by Dörfler and Stierand (2021), does not mean stopping things from happening, instead it is more about making conscious what is happening anyway, whether we like it or not.

Summary of the Role of Researcher

Stake (2010) described the qualitative researcher as an instrument, observing action and contexts, often intentionally playing a subjective role in the study, using his or her own personal experience in making interpretations. As a qualitative researcher, it is important to learn to overcome biases to minimize the effects of the biases will have on the research. The purpose of bracketing, as suggested by Olekanma et al. (2022), is to ensure that researchers are disciplined and open to hear what the study participants are saying, as what participants say about their own experience is their personal truth. Tufford and Newman (2010) suggested the researcher's emotional reactions and past experiences, or cognitive biases have the potential to distort data

collection and analysis. The authors continued by suggesting bracketing has the potential to enrich the data collection and analysis. The authors concluded by positing bracketing has the potential to greatly enrich data collection, research findings and interpretation.

Research Methodology

Qualitative methodology is the research method that has been selected for this study. Qualitative methodologies can move beyond reporting behavioral or observational measurement and toward better understanding of experiences (Wester et al., 2021). This research was conducted using a multiple case study approach. The multiple case study approach allowed for inquiry into virtual teams across many organizations to acquire a deeper understanding of how relationships are built among virtual team members.

Cho et al. (2022) suggested the use of multiple case design provide innovative approaches to case study research aiming for a strong foundation for the research. Conversations took place with multiple team leaders to understand their approaches in ensuring relationships are developed among the members of their teams. Stake (2010) suggested that qualitative studies are best at examining the actual, on-going ways that persons or organizations are working. The author further explained qualitative research as research that allows personal experience, intuition, and skepticism to work alongside each other to refine theories and experiments. Examining leadership's role in building relationships among virtual team members will require an extensive look at the leader's experiences. Also, identifying the tools used to develop the virtual team members' cohesive relationships was the goal of this qualitative study. The narrative analysis targeted virtual team leaders faced with developing teams where there were no prior interactions; therefore, no opportunities for previous relationships to be developed.

Discussion of Flexible Design

The qualitative researcher must decide how to frame the study, and thus how to tell the story (Brown, 2003). The author continued to discuss the flexible design by stressing qualitative researchers are always faced with these questions and does not always know until there has been progress with the project where the emphasis was placed. The direction can change and the researcher's realization about the material will develop based on the ongoing interaction with the participants (Brown, 2003). Denny and Weckesser (2019) suggested a simple description would be that qualitative research considers why individuals think or behave the way that they do and how they come to understand these complex thoughts and actions. The approach of this research study was to use interviews and questionnaires to engage the participants in the subject matter to reveal how leaders ensure relationships are developed among the team members. The interview was a versatile tool for data production, allowing the use of multisensory channels: verbal, nonverbal, speech and listening (Cheron et al., 2022). The use of recorded interviews using pre-designed questions helped the researcher to identify common practices among the leaders/participants and identify the gaps in practices to ensure the relationships are developed among team members.

Discussion of Multiple Case Study

In this research, a multiple case study design was used. Case study as a research strategy is often justified by the need to expand knowledge of the topic (Furlanetto et al., 2023). According to Dresch et al. (2015), the case study approach must address the research question to increase the chances of handling the issue proposed. A case study is a flexible research procedure, but it is important to follow the methodological rules for the proper implementation for the multiple case study (Cwiklicki & Pilch, 2021). With the case study approach, research

evaluated various teams where members were not located in the same office and assessed how the leadership approach encourages team relationships. The research included (a) how the teams are structured and the practices, (b) tools, and (c) techniques used by leadership to enhance relationships among the team members that may exist in different regions and have to rely on each other to improve the organization's success.

Discussion of Method(s) for Triangulation

Triangulation, as described by Yin (2014), is the convergence of data collected from different sources to determine the consistency of a finding. This data can be collected through the interview process, through focus groups, or through the researcher observing actions-of-study of participants. Triangulation is recommended as a good practice in conducting case study research and is traditionally envisaged as offering validity through convergence of findings, sources, or methods (Farquhar et al., 2020). Greyson (2018) described triangulation as an information practice that includes information seeking, assessment, and sense-making of information gathered across multiple perspectives. While there are multiple triangulation approaches, this research utilized triangulation to include (a) information gained from interviews with the participants, (b) additional field notes taken during the research process, and (c) other sources that support the data gathered for research. The inclusion of triangulation in the construction of qualitative research should be considered in terms of current goals and objectives (Dzwigol, 2020). The author continued to suggest that various strategies are used to validate qualitative research but triangulation, which provides for simultaneous access to several sources of data, methods, theories, and expert opinions, is of primary importance.

Summary of Research Methodology

Creswell (2014) suggested the qualitative method of research study allows the researcher to examine the participants' experiences in the research. Unlike quantitative analysis, qualitative research is not based on statistical data and allows a somewhat realistic examination of the studied topic. Evaluation of leadership approaches to support the development of relationships among team members was the plan for understanding how this impacts organizational success. The expectation of the outcome was when leadership does not understand the importance of these relationships, there is a negative impact on the organization.

Participants

Ethical guidelines in academic associations tend to emphasize the need for fully informed consent from research participants (Roulet et al., 2017). As Hewitt (2007) explained, informed consent is an explicit agreement by participants to participate in the research process after receiving and comprehending information regarding the nature of the research. The researcher sought written permission when required (see Appendix B) from the human resources department of each company targeted for the research. The human resources department was expected to supply a list of organizational positions that meet the criteria of a virtual team leader, would be at least 18 years of age, and have the ability and capacity to give their time to research requirements. The planned number of participants to be approached was between 20 and 30 leaders of virtual teams whose organizations exist in the metropolitan area of Charlotte, NC.

Once permission was requested by the researcher, the Human Resource departments did not require written permission, but were able to confirm whether they had virtual teams within their organization. The potential participants were contacted, via social media (LinkedIn) and by email, with an invitation to participate (see Appendix C). Once the contact was made and the

participants expressed interest in participating, interviews were scheduled by the researcher, the time and date were recommended by the participant, and the researcher made all efforts to accommodate the initial suggested time and date recommended. A consent form (see Appendix D) was sent by the researcher to the participant for review and signature prior to the date of the interview. The researcher also signed and returned a copy to the participant. The interview was expected to last between 45 minutes to 1 hour using open-ended questions included in the interview guide (see Appendix E). A 5-minute intermission was offered at the first notice of participant's fatigue, or after 20-minutes of continuous conversation. Upon completion of this intermission the interview resumed to completion.

The researcher requested from participant any organizational rules/measures pertaining to conducting this interview via an online platform. The suggested online platform was Zoom, which offers the benefits of audio and video recording capabilities. As mentioned in the consent form, the participant's identity was kept confidential.

While the researcher implemented the research process, the interview questions, and the feedback analysis, the participants shared information based on their feelings, knowledge, and experiences. This information is only useful if the researcher can accurately represent the feelings and experiences of the participant. According to Creswell (2014), there are strategies to help establish this accuracy to include (a) collaboration with participants, (b) checking with the participant for validation of the interpretation of the participant's feedback (member checking), and (c) prolonged engagement in the field of study. Common problems with member checking include: (a) a lack of response from most participants, (b) creating additional intrusion for participants, (c) little or no substantive changes in research findings, and (d) the need for additional project resources (Thomas, 2017). With this knowledge, it was essential for the

researcher to inform participants that member checking is a part of the research process to ensure participants input has been interpreted and is represented correctly in the research.

Population and Sampling

Providing an adequate sample of virtual team leaders was the purpose of this research. Creswell (2015) suggested sampling in qualitative studies should include recruiting individuals who can help inform the central phenomenon in the study. It was important to select individuals for the study who had experienced the phenomenon being explored. Holmlund et al. (2020) described this as purposeful sampling. Unlike quantitative research which deals with a massive amount of data for producing statistical and numerical outcomes, qualitative studies employ a small number of samples (Alam, 2021). The researcher selected the participants from the medical device industry including distribution, manufacturing, design, and service sector, not including hospitals and locations that treat medical patients. This industry is believed to be well-represented in the Charlotte, NC area. The sampling strategy used is maximum variation sampling. Creswell (2015) defined this strategy as one that documents diverse variations and identifies important common patterns. It is essential to have high-quality data, which means generous, detailed data that allows for rich descriptions and explanations that are important in qualitative research (Holmlund et al., 2020).

Discussion of Population.

In the Charlotte, NC metropolitan region, many organizations require leadership roles to help maintain operations daily. The Charlotte metropolitan region encompasses Charlotte, Mecklenburg County, and its surrounding 15-county area making it a dynamic and diverse population and workforce (www.charlotteregion.com). The total number of anticipated participants was from 20-30 or until saturation was met. The participants included in this study

were employed by organizations located in the Charlotte region, and (a) have employees working at alternative locations in the Charlotte area or (b) have employees who serve on the same team and reside in locations outside the Charlotte area. The employee's office can be within the Charlotte region or anywhere in the world. However, their office cannot be in the same location as the leader or other team members. It was anticipated that the leader resides in a different location than the team members that he/she is responsible for leading.

The participants were selected from the population group located in the Charlotte, NC metropolitan area. Because of the desire to encompass a good representation of virtual team leaders in this area, there are no restrictions on the particular function of the company represented. The region consists of a diverse populace of companies, and there will not be a focus on any particular company in this research. The location of the team and the team leader was an important consideration to be a participant. The team must have been connected virtually. Virtual teams are that the members are scattered at different locations, distances and times and are linked together through the techniques of electronic medium communication (Mehta & Shah, 2019). These teams collaborate, communicate, and interact to surpass the limitations of time and distance via some information technologies such as telephone, email, facsimile, teleconferencing and videoconferencing (Lin & Roan, 2022).

Discussion of Sampling

Sampling is an integral component of all research designs (Abrams, 2010). The author suggests that qualitative sampling is almost always assumed to be naturalistic, in that it takes place in ordinary settings where people 'do' their lives. The description of participants' experiences forms the basis of addressing qualitative research goals (Asiamah et al., 2017). Qualitative researchers can draw their samples from the target population using general

qualitative sampling methods depending on its size and complexity and whether every member is willing to participate in the study. Participants were individuals serving in leadership positions. They are a team of people who reside in various locations and have the same or similar responsibilities to the organization.

Purposeful sampling was used in this case. Creswell (2015) described purposeful sampling as the process of selecting participants for a qualitative project by recruiting individuals who can help inform the central phenomenon in a study. Alam (2021) suggests the purposeful sampling method allows the researcher to select the most appropriate objects based on their knowledge and ability to reply to the study queries. Therefore, a level of comprehension of the team members' purpose and responsibility was to be crucial to this study. This focus on team members can give a different perspective on how relationships have been fostered by team leadership and the impact it has had on organizational success. A maximum variation strategy was used when selecting participants to participate. It is vital to make sure the chosen individuals and teams represent various companies within the medical device industry because this research is not focused on any particular company or function in the Charlotte metropolitan region. Therefore, it is crucial to have multiple sectors represented and seek common patterns in how leadership helps develop relationship-building among team members.

Selecting a sufficient sample size is imperative for the creditability of the research findings. Researchers – particularly those working at the interpretive end of the spectrum of qualitative research – face a genuine challenge when seeking to justify sample sizes to funding bodies or ethical review committees (Blaikie, 2018). Research of sample size performed by Boddy (2016) recommended a range of 15 to 30 interviews for a case study approach. The author

continued to support this notion by suggesting that a qualitative sample size over 30 becomes too unwieldy to administer and analyze.

In this research, the sample size aligned with that suggested by previous research conducted by Boddy (2016). The number of participants was at minimum 15, and maximum of 30. There were 20 participants interviewed. The research at this point was saturated. Saturation, as described by Saunders et al. (2018), is a criterion for discontinuing data collection and/or analysis.

Summary of Population and Sampling

While there could potentially be a large number for sampling, the actual participants depended on how many approached subjects were willing or able to participate. Of those who volunteered and qualified, they met the study's necessary parameters. According to Asiamah et al. (2017), a qualitative researcher may face the need to draw a relatively small sample from a large study population entirely made up of reasonably eligible members. This research targeted the larger population of businesses in the Charlotte metropolitan area. Yet still selected the smaller sample size, 20 to 30 participants, with the characteristics needed to clarify this research's focus. The leader had multiple team members that don't exist in the same location; they should communicate using tools suitable for conversation and interaction but cannot be physically present in the same location. The 45-minute to 1-hour interviews concluded at a maximum of 30 participants or until data saturation was achieved.

Data Collection & Organization

Data collection within a qualitative (flexible) multiple case study included using multiple sources, such as interviews, observations, documents, and artifacts (Creswell & Poth, 2016). These diverse ways of data collection helped to understand the issues widely and explored the

information more descriptively (Alam, 2021). Selecting data collection and sampling techniques can be somewhat daunting because there is no single, universally accepted correct option (Draper & Swift, 2010). The data collection should be based on informed consent, the participants should be given the assurance of confidentiality and anonymity, and the undue intrusion should be avoided with proportionate probing and exploration (Chai et al., 2021). The data collection in this study was through interaction with the virtual team leaders and the goal was to gain an understanding of the leaders' approach to relationships among team members. The data were translated, reviewed, and returned to the research participant (the team leader) for validation of content. Organizing the data is equally important to develop a clear perspective on the information gathered from the interviews and discussions with the participants.

Data Collection Plan

Qualitative research is used for exploration when the variables to measure or the questions to ask are not known (Creswell, 2014). It is a way to examine the experiences of the participants involved. Williamson and Perumal (2021) suggested that the use of data collection methods such as interviews and focus groups elicit rich data that allow researchers to reflect on subjective meanings and interpretations. Draper and Swift (2010) suggested interviews are the most widely used technique of data collection in qualitative research. In this research, a semi-structured interview approach was used. Draper and Swift (2010) described the semi-structured interview approach as one that the interviewer has a clear list of issues to be addressed and questions to be answered but question structure, phrasing, and placement are flexible, and the interviewer is also free to probe responses.

This research took place via computer aided technology and video conferencing. This setting allowed the researcher to observe the facial expressions and reactions to the questions and

the discussions that were conducted with the participants. The desired location of the participants during the interview was in their typical daily workspace.

Permission to conduct this research using human participants was obtained from the institutional review board (IRB) of Liberty University. This process helps to ensure no ethical issues will arise in the research. According to Maxwell (2019), this phase ensures that human participants' treatment takes precedence over any study's potential findings. The researcher inquired if consent was needed from the human resources department of each organization of interest where the participants are employed. A request for permission was prepared in the event it was required by the Human Resources Manager (HRM) for permission to approach potential participants within their organization (see Appendix A). If permission was needed and granted, the HRM will provide a document on the official company letterhead to the researcher granting permission to approach the potential participants for the research (see Appendix B). In this case, there were no requirements from the HRM of any of the organizations due to no confidential information being shared about the organizations and the identities of the participants were kept confidential.

Next, the participants were approached inclusive of the letter of invitation (see Appendix C), either through LinkedIn or via email. Participants were instructed that interviews are on a voluntary basis, and they could discontinue participation at any time. Prior to the interview, each participant was given a consent form (see Appendix D), with an overview of the study's purpose and the educational institution with which the researcher is affiliated. The rights and guarantees of the persons participating in the study were also included in this form (see Appendix B). There was no anticipation of the use of corporate names or the sharing of confidential information.

Member Checking

Once the interviews were conducted, the researcher transcribed the interview conversations and prepared for follow up with the participants. Member checking was the next step for the researcher to ensure validation and trustworthiness of the data collected. This allowed the interview participants to review the data in the transcribed documents to validate whether the information was correct, and their responses were properly documented. Birt et al. (2016) pointed out that the trustworthiness of results is the bedrock of high-quality qualitative research. Trustworthiness, according to Hays and McKibben (2021), refers to the degree to which a qualitative study genuinely reflects through its design and report participant perspectives and the context under investigation. Trustworthiness, according to Williamson and Perumal (2021), is established through credibility, transferability, dependability, and confirmability. Member checking, also known as participant or respondent validation, is a technique for exploring the credibility of results. According to Rose and Johnson (2020), member checking is the most popular form of building trustworthiness.

Follow-up Interviews

To ensure the interpretation of the participant's responses were accurate, the researcher used member checking in the research process. Each participant was given a written transcript of their research session to review. After which, a follow-up session took place with a computer aided conference. Member checking is the potential for research bias might be reduced by actively involving the research participant in checking and confirming the results suggests.

Instruments

Interview Guides. In this study, interviews were conducted via Zoom web conferencing. Zoom is commonly used due to its user friendliness, possibility to share the screen to show

visual information, and ability to record the interview (Saarijarvi & Bratt, 2021). The same pre-determined questions were used for each meeting. The open-ended interview approach was used because it allowed for a better analysis of the responses. The interview guide (see Appendix E) includes the open-ended questions that lead to discussions regarding the team structure, the team leader's role and responsibilities, and how the leader shapes the team to interact to help aid in relationship building. The data that were obtained from the 15 open-ended questions were used to comprehend and analyze the research questions for this study.

Data Organization Plan

Organizing and tracking the data for this research was necessary. A listing of research participants was devised, and an identification number was assigned with the following format for their participant number: Alpha-numeric date - alpha numeric. For example, a participant who agreed to be in the study and becomes a part of the study was identified as a number in this format A-05152021-A1. There were no identifiable characters that are traceable; therefore, the confidentiality of the participant and the company they represented was and continues to be protected. If the initial alpha numbers had been exhausted, the format would have been AA, BB, and so on for the Alpha numbers.

Once the consent form was signed by the participant, the interview process began. The researcher transcribed the interviews and asked the participants to review the transcribed document for accuracy and proper representation. These transcriptions were cataloged in a password protected Microsoft Word file. Each interview was notated by the participant's identification number previously assigned and filed chronologically. All documents were cataloged in duplicate (on a private computer and external drive) to secure all information obtained in the research.

Summary of Data Collection and Organization

The instruments needed to perform data collection help in examining the topic closely and critically. The researcher, in this case, was an important instrument. Questionnaires, conversations, and interactions with the participants were crucial for the researcher. The information attained will always be kept confidential, and the researcher must understand the importance of protecting this information. The discussions took place via the video conferencing tool, Zoom. The goal of collecting the data via the interview questions, which were open-ended, allowed for more in-depth discussions on the topic.

Data Analysis

Data analysis in qualitative research consists of preparing and organizing the data for analysis; then reducing the data into themes through a process of coding and condensing the codes; and finally representing the data in figures, tables, or a discussion (Creswell & Poth, 2016). The researcher used QSR NVivo software and Microsoft Excel for the analysis and coding of the data. Basit (2003) described data analysis as a dynamic, intuitive, and creative process of inductive reasoning, thinking, and theorizing. The assessment and organization of the data were formalized into a qualitative report. The process is referred to as coding. Coding is one of the significant steps taken during analysis to organize and make sense of textual data (Basit, 2003). The author continued by describing codes or categories as tags or labels for allocating units of meaning to the descriptive or inferential information compiled during a study. The researcher, in this case, continued to review the data gathered to conclude the themes that continued to appear in many of the interview sessions based on the responses given by the participants.

Emergent Ideas

Following the organization of the data, researchers continue analysis by getting a sense of the whole database. Writing notes, short phrases, or key concepts that occur to the reader in the margins of field notes or transcripts or under images helps in the initial process of exploring the database (Creswell & Poth, 2016). Birks et al. (2008) suggested data exploration enhances continuity of conception and contemplation is enabled and communication is facilitation using memoing. While guidelines exist to aid in the production, and use of memos, memoing remains a flexible strategy wherein the process of construction and nature of content is determined by the preferences and abilities of the researcher and the aims and focus of the specific study. Memoing enabled the researcher to engage with the data to a depth that would otherwise be difficult to achieve.

Creswell and Poth (2016) described reading and memoing leads to emergent ideas by using the analytic strategies of taking notes while reading, sketching reflective thinking, and summarizing field notes. This will lead to analytical outcomes or code development. Once the coding and memoing analysis were completed, there were ideas and themes that emerged. These emergent ideas allowed the researcher to identify the practices that were common among the research participants and also identify if there were any unique practices performed by a small portion of the research participants.

Coding Themes

Coding is an integral part of qualitative research for many scholars that use interview or focus group data. Current practices in coding require transcription of data prior to coding. Creswell and Poth (2016) suggested the coding process starts after reading and memoing to describe, classify, and interpret the data. Williams and Moser (2019) described coding in

qualitative research as processes that enable collected data to be assembled, categorized, and thematically sorted, providing an organized platform for the construction of meaning.

The researcher read and reviewed the transcribed data and the written observations of what was witnessed during the discussion. Common themes were noted during this process to develop support for the research. Theron (2015) urged the researcher to start the coding process while they are collecting the data, keeping in mind that codes may change during later cycles. This information was stored on a computer and access is password protected. A backup file is stored on an external drive that is also protected by password access only. In this research, an analytical software program, QSR NVivo, was used to appropriately handle the coding of the data collected. Notations were made on the transcribed document, and common codes were highlighted in perspective colors to indicate similarities or commonalities. Emphasis was on the leaders' common tools and approaches to enhance the ability for relationship development among the team members.

Interpretations

Researchers must build detailed descriptions, apply codes, develop themes or dimensions, and provide an interpretation in light of their own views or views of perspectives in the literature (Creswell & Poth, 2016). The authors also note that developing interpretations involve relating category's themes and families to analytic framework in the literature. Maher et al. (2018) suggested deep and insightful interactions with data are a prerequisite for qualitative data interpretation. The authors continued by suggesting the researcher must also employ imaginative insight as they attempt to make sense of the data and generate understanding and theory. Interpretation is a matter not of following mechanical rules, but of performing a thorough and comprehensive analysis while having the courage to search for the underlying meaning of the

verbatim text (Lindgren et al., 2020). Coding represents a more mechanical application of labels to segments of data; the associated task of interpreting the codes and deriving an overall interpretation from them is not mechanical. It requires insight to get patterns to emerge (Linneberg & Korsgaard, 2019).

Data Representation

The researcher in this study presented data representation, as discussed by Creswell and Poth (2016), by developing naturalistic generalizations of what was learned. A table was created consisting of techniques used by leaders after the outcome of analysis of information was gathered from the interviews and conversations. The goal was to display similarities in the techniques used by leaders to aid in relationship development among team members. The similarities were seen more in the outcome and not the processes. None of the participants had documented processes for ensuring relationships were developed, most based the steps used on their own intuition of what needed to happen to build a cohesive successful team with strong collaboration and dependability on each other.

Analysis for Triangulation

According to Creswell and Poth (2016), the researcher engages in validation strategies, often multiple strategies, which include confirming or triangulating data from several sources, having studies reviewed and corrected by the participants and employing other researchers to review the procedures. Baker et al. (2020) suggested triangulation is a powerful technique that facilitates validation of data through cross verification from two or more sources or methods. Using triangulation can help to provide a consensus view and additional insights into specific research issues. In this research triangulating, the data included following up with the participants to review the transcript of data for accuracy. Also, the researcher compared the

responses given by participants and looked for a pattern of thoughts or behaviors pertaining to the research topic.

Summary of Data Analysis

Collecting, organizing and analyzing data that were collected is an important part of discovering the emerging themes from the research. The researcher was careful to understand the feedback from the participants in order to recognize the major themes. This included allowing the participants to review the transcripts of their interviews and further discuss with the researcher any areas that needed further clarification. This member checking allowed the researcher to have clarity of each of the research participants, and reveal, with confidence, the experiences of the participants.

Reliability and Validity

Due to the nature of qualitative research, validity and reliability serve as critical aspects of the research. Validating the research requires the scholar to present accuracy in the findings. Validity has to do with truth, rigor, and value of research or, in short, the quality of the research (Anderson et al., 2018). This is assessed by the researcher but must be plausible to others that read the research. The experience of the researcher plays a crucial role in validating the information in the research. Cypress (2017) suggested that planning and implementation are simultaneous in qualitative inquiries, and the research design can change or is emergent. Continuing with this description, the author suggests preliminary steps must be accomplished before the design is fully implemented, from making initial contact and gaining entry to the site, negotiating consent, building, and maintaining trust, and identifying participants. Qualitative studies can be seen as more complex than quantitative. Cypress (2017) suggested that quantitative research follows a structured, rigid, pre-set design with the methods all prescribed.

Reliability.

Reliability refers to the measures undertaken to provide information about the trustworthiness and absence of random error in research (Lock & Seele, 2018). Rose and Johnson (2020) described reliability as the soundness of the research, particularly in relation to the appropriate methods chosen, and the ways in which those methods were applied and implemented in a qualitative research study. These measures will include (a) reviewing the transcripts to make sure no mistakes were made, (b) ensuring the codes are aligned and there are no outliers that will impact the validity of the research, and (c) cross-checking codes (Creswell, 2014). If the information is not reliable, the validity of the research can also be questioned.

Validity.

In qualitative research, there are multiple, often highly specified types of validity that align with other aspects of the research project (Rose & Johnson, 2020). Triangulation can be a tool used to assist in validating information from research. Triangulation also has been viewed as a qualitative research strategy to test validity through the convergence of information from different sources (Carter et al., 2014). Member checking is also a technique for ensuring validity in the research. It is important to determine the accuracy of the information gathered. The researcher can apply certain biases when analyzing the research based on personal experiences and assumptions. Birt et al. (2016) advised that the potential for researcher bias might be reduced by actively involving the research participant in checking and confirming the results. Applying the member checking technique help to validate the researcher's interpretation of the participants responses are accurately displayed in the research findings.

Bracketing.

The researcher needs to decide how and in what way his or her personal understanding will be introduced into the study (Creswell & Poth, 2016). Starks and Trinidad (2007) noted that the researcher must be honest and vigilant about his/her own perspective, pre-existing thoughts and beliefs, whereby they recognize and set aside their prior knowledge and assumptions, with the analytic goal of attending to the participants' accounts with an open mind. According to Fischer (2009), bracketing is not a setting-aside that one maintains until the completion of data analysis, it is a mindfulness that one brings to regularly ask about assumptions that have gone into what one saw and into how "language" (p. 584) what was apprehended. In this research, the researcher believes that virtual team leaders should have interest in how the team members relate to each other even when they are not co-located. The researcher will reflect on personal understanding of what the anticipated emergence of the research, versus what the actual outcome of the qualitative research.

Summary of Reliability and Validity.

Quantitative research is supported by the positivist or scientific paradigm that regards the world as made up of observable, measurable facts (Cypress, 2017). The author contrasted qualitative research by suggesting that this research produces findings not utilizing statistical procedures or other means of quantification. The importance of assuring validity and reliability in qualitative research lies with the researcher and the advantages he/she takes with the participants' interviews. The quality of the study lends to displaying reliability and validity to the research.

Summary of Section 2 and Transition

The responsibilities of a team leader can vary. Therefore, the approach to managing a team has also changed over the years. The current business environment, which spans globally, warrants team members residing in various states, regions, or countries. Although the team may not be located in the same office, the concept of being a team is still important. From time to time, the team should depend on the collaborative efforts of the members to accomplish goals and be successful. Details of how this research study was performed are included in Section 2. This qualitative research examined the role leadership plays in ensuring relationships are built among the team members. Hence, the members will know each other well enough to be comfortable with collaboration among the group. Reaching out to other members to seek input, feedback, or knowledge from previous experiences can help members and allow the leader to focus on other activities essential to organizational success.

The qualitative study focused on the Charlotte metropolitan geographical area. The participants were in leadership positions with an organization residing in this area. The team members must not be located in the same area as the leader. Questions were created to administer in the interview process with the team leader for an in-depth discussion of the approach to successfully developing relationships among the prospective team members. This approach was aimed to identify common tools used by leaders to aid in developing relationships among team members for better collaboration which will lead to a successful organization.

Research exists which explores the behaviors of leadership to influence a team's performance (Ceri-Booms et al., 2017). This research focused on the role leadership plays in building relationships among team members when the members are not located in the same office and can have daily face-to-face interaction. The general problem addressed is the failure of

leadership to aid in relationship-building among virtual team members resulting in a lack of organizational success. The purpose of this qualitative research was to highlight the methods and tools used by leadership to aid in relationship-building among virtual team members. Using carefully formulated research questions the actions of leadership was evaluated and discussed to understand the impact on relationship building among virtual team members. This multiple case study approach allowed the researcher to evaluate the similarities (or lack thereof) in leadership approach to aid in relationship building across many organizations. The emerging themes of this research is utilized by leadership will aid in the development of collaborative, trusting relationships among virtual team members.

Section 3: Application to Professional Practice and Implications for Change

The purpose of this study was to understand the role leadership plays in fostering relationship-building among virtual team members. The participants in this study served in leadership positions, overseeing virtual teams in the medical device industry. This section provides an overview of the study, further discussing the conceptual framework. Also discussed are the emerging themes that resulted from the research performed for this study.

Overview of the Study

The purpose of this study was to understand the role leadership plays in fostering relationships among virtual team members. With the growth of virtual teams in the last decade, the responsibility of leadership has shifted. No longer does the leader hold the obligation to ensure the team members are performing their tasks, but their responsibility also includes ensuring the team members are engaged, growing together, collaborating, and communicating. The general problem addressed in the research study is the failure of leadership to aid in relationship-building among virtual team members. Virtual team members don't have the same opportunity for relationship growth to develop organically due to the lack of daily face-to-face interaction. These team members may be on the same team and unless opportunities are granted for face-to-face interaction, they may never meet their colleagues in person.

In this study, the researcher selected to focus on leadership of organizations in the Charlotte, NC metropolitan area and affiliated with the medical device industry. The companies selected had either leadership or team members located in this geographical area. The researcher developed a list of 15 open-ended research questions that would help to identify tools and processes used by leadership to help foster relationship-building among team members. The researcher was interested in the discovery of established tools and processes, and in identifying

the similarities across the organizations included in the research. Also, important to this research was to establish if leadership revealed the development of these relationships was essential to the success of their department and the overall organization. In this flexible qualitative multiple case study, the researcher used open-ended interview questions to discuss with the leaders the methods and the approaches used to give virtual team members opportunities to meet and collaborate resulting in the formation of relationships.

In the research process, 20 participants were interviewed, all serving in leadership roles over virtual teams within their organization. Each participant was asked the same questions and the discussion led to the discovery of whether the leader was creating opportunities for relationship-building or if the leader felt there was no need to take an active role in ensuring the relationships were developed. The researcher found it interesting to see the lengths some managers took to create opportunities, while others felt that even in virtual teams, relationships would be developed organically.

In developing the research, there were four areas identified that made up the research framework. The research framework included a list of concepts that helped in the comprehension of the study. The concepts, theories, actors, and constructs were defined in this research. The identified concepts assisted the researcher in looking for key topics that needed to be explored to ensure the inquiry of the interview questions encompassed a good overview of the team dynamics. For example, one of the concepts was disintegrating forces that can pull the virtual team apart. In this area of the interview, the researcher asked the question about the location of the team members. The purpose of this question was to identify important characteristics, such as did all team members reside in the same state, country, time zone, and other areas. These are all forces that can be a problem, especially if the team members reside in different time zones and

there were few overlapping hours in their workday. This can cause difficulties when the leader attempts to create opportunities for the team members to work together or collaborate on a topic.

The theories identified in the research framework, relational leadership theory, transformational leadership, and servant leadership were all noticed in the discussions with many of the leaders. The most interesting was servant leadership. Many of the leaders displayed characteristics of a servant leader. The amount of time the leaders took to ensure the team members had everything needed to be successful. The number of opportunities that were created by leadership to ensure the team members were able to meet face-to-face to develop and grow relationships with their colleagues exceeded the expectations of the researcher. Relational leadership theory surfaced in many discussions when the leaders explained how the team members were more comfortable with interacting after they met face-to-face and participated in team-building exercises that created a sense of dependency and trust. The leaders, in most cases, expressed how they witnessed increased collaboration after a few face-to-face meetings. Transformational leadership theory, like relational theory, was more apparent after there were more face-to-face meetings and opportunities for collaboration.

The actors were important in this research. The focus of the research was on the actions of the leaders. No team members were interviewed nor were any specific businesses identified, therefore the level of importance of the team members and the organization, from the leader's perspective, were critical to the outcome of the research. The interview questions allowed the discussions to highlight both the team members and the organization from the perspective of the leader.

The constructs of the framework were communication and collaboration, and shared leadership. Leadership must take the responsibility of ensuring communication and collaboration

are happening among the virtual team members. It is important to be able to witness the team members depending on the input of their colleagues on certain topics. Also, shared leadership is where team members are starting to take the responsibility of ensuring this communication and collaboration is taking place. Many of the team members will schedule meetings with one or more of their colleagues to elaborate on a topic. Many times, conversations take place without the presence of leadership.

Twenty participants were interviewed, but saturation was realized at 17. Perhaps if the industries had been varied and less focused, saturation would not have been met at this number. Each member agreed to a designated time for a Zoom meeting to be held to participate in the interview process. After completion of the interviews, the verbal sessions were translated into written format and sent back to the participant to ensure their responses were adequately represented. Afterward, the analysis was performed, and the results were concluded.

This study provided an evaluation of the role leadership plays in relationship-building among virtual team members. The result of the discussion with the research participants emphasized the majority of the leaders understand the importance of relationships among the members of their virtual teams. Each leader had their perspective on the best practice for building these relationships. From this perspective, three themes emerged.

Theme One: The Importance of Collaboration. Leadership must create opportunities for team members to collaborate among the team and not always feel the need to include leadership.

Theme Two: The Need of Sufficient Tools for Communication. Leadership must ensure that team members have sufficient tools for communication. Although the team members don't exist in the same location, they must be able to connect to communicate when needed.

Theme Three: The Importance of Face-to-Face Interaction to Build Relationships.

Leadership must be able to create opportunities for the team members to meet in person to develop a bond to feel a connection with each other.

Presentation of the Findings

The purpose of this study is to explore how leadership fosters relationship-building among virtual team members. Mutha and Srivastava (2023) suggested that virtual teams are characterized by short social exchanges and a lack of para-verbal and non-verbal communication. The authors further suggest this poses several challenges to virtual leaders. The research was framed around research questions developed to understand leadership's role in fostering relationships among virtual team members. A questionnaire was developed to encourage open discussions with the research participants to evaluate their actions that help virtual teams develop relationships among the team members. All participants served in leadership roles within their perspective organizations. This qualitative multiple case study focused on organizations within the medical device industry.

Themes Discovered

This qualitative (flexible) constructivism multiple case study research was focused on the role leadership plays in fostering relationship-building among virtual team members. The research questions to be addressed were (1) What is the leader's role in relationship building among team members in a virtual team?, (2) Why is it important for team members to build positive, cohesive relationships with each other in virtual teams?, and (3) What are the tools and processes used by leadership to aid in relationship-building among virtual team members?

The researcher conducted interviews with 20 participants using Zoom meetings. Each participant served in a leadership position for a company in the medical device industry. The

companies have a physical location in the Charlotte, NC metropolitan area and the leaders' team members were situated in various locations, not co-located in the same office.

The interview questions were fashioned to identify how leaders foster relationship-building among their team members. The researcher was especially interested in understanding if there was any reflection on the success of the team and ultimately the organization. The careful approach prohibited the researcher from discussing any information that would reveal the identity of the organization or the research participants. The job responsibilities of the research participants varied; therefore, the opportunity to evaluate if there were similarities based on function was not considered in this research.

The researcher developed a list of 15 open-ended questions to interview the research participants. There were 20 participants in the research study. Not a consideration for qualification, but the size of the participant's team was at least two people. Table 1 below shows the variation in team size for the 20 participants.

Table 1

Team Size Comparison

Team Size Range	2-5	6-10	11-15
Number of Teams in Range	7	6	7

There was no requirement for the area of responsibility for the leaders; therefore, there were some variations in the idea of what level of relationships the team member needed. The research questions did not differ based on the function. Each research participant met the requirements to participate in the research. The themes that emerged were (a) the importance of collaboration, (b) the need of sufficient tools for communication, and (c) the importance of face-to-face interaction to build relationships.

Interpretation of the Themes

The discovered themes emerged after the interview process, and during the transcription of recorded interviews, and member checking were completed. After these processes were finished, the researcher started to analyze and code the findings. The tool used for coding was QSR NVivo, which helped the process of analyzing and coding the information leading to the discovery of the themes. Locke et al. (2022) described coding as the work of scrutinizing, pondering, and organizing collected observations and relating them to theoretically relevant abstract features, possible relationships, and research questions. The themes realized in the research is discussed in detail in this section.

Theme One: The Importance of Collaboration. The first theme was that all participants expressed a level of understanding that virtual teams need to collaborate and have interactions for the group to grow, develop, and successfully meet the goals of the organization. Whether the leader had tools or processes in place to encourage relationship-building, they all revealed collaboration was important.

Theme Two: The Need of Sufficient Tools for Communication. The second theme was the modes of communication among virtual team members. Each research participant revealed the importance of various ways to communicate within virtual teams. No longer does electronic mail (e-mail) and a desk phone serve the purpose of fulfilling team members' ability to communicate.

Theme Three: The Importance of Face-to-Face Interaction to Build Relationships. Another theme revealed in the research is there are leaders that think face-to-face meetings are important to facilitate relationship-building among virtual team members. Many also express that

face-to-face time can be used as an opportunity for training and learning, as well as team building. The three themes will be discussed and how they pertain to the research questions.

Theme One: The Importance of Collaboration. The first theme is the realization that collaborating is essential to the success of building relationships among virtual teams. Research question 1 focused on the actions research participants have taken to foster relationship-building. Four of the interview questions were centered on research question 1. The interviews performed for this research revealed leaders' actions, in all cases, must offer an opportunity for collaboration for the team members. The leaders revealed many methods that they deem as successful in giving the team members the opportunity to collaborate. The most popular was hosting team calls. These team calls take place using video conferencing, such as Microsoft Teams or Zoom.

The occurrence of the meetings varied, 40% of the participants schedule team calls either weekly or biweekly. Other meetings were scheduled either monthly or quarterly, this applied to 25% of the participants. Fifteen percent (15%) of the leaders that did not have regular occurrences of virtual meetings but scheduled them as needed. According to Mayer et al. (2023), because of positive experiences for organizations, teams and individuals, like saving resources and greater flexibility on different levels, virtual collaboration will be indispensable in the future despite existing local proximity. There were only 10% of the participants that did not use team calls as a tool for collaboration but used another tool as an opportunity for collaboration among the members. This tool was identified as project opportunities.

Participant C09142023-C1 described the project opportunity by suggesting she looks for opportunities for her team members to work together. She is careful to pair people that may not have had a lot of time to get to know each other. She assigns the task to them and asks them to

put together an overview to determine how to fulfill the needs of the project. She then asks for updates to be given during the course of the project. She suggested she is always challenging how they interchange information and evaluating how the cohesiveness grows during the course of the project.

Theme Two: The Need of Sufficient Tools for Communication. Another theme that emerged during the research process is the importance of the tools used for communication. It is equally important to know when to use certain tools. For example, one of the participants discussed the most effective ways to use instant messaging versus e-mail, text, or phone call. According to Newman and Ford (2021), just buying and distributing communication technology to virtual employees will not automatically make them effective. During the interview process, the researcher was surprised by the amount of thought behind how leaders utilize the tools used for communication. The main communication tools were e-mail, Microsoft Teams (video conferencing and instant messaging); and mobile phones (calls and texting). In the interview discussions with each participant, a discussion occurred regarding the level of importance for the tools used. During the first discussion, the researcher was intrigued by the amount of thought behind when the tools were considered for usage. E-mail was important to all the participants; 100% of the participants revealed they use e-mail. The interesting finding was only 30% use e-mail as their first choice when communicating with their team. But 100% of the participants said when a topic was important and needed a well thought out response or feedback, they use e-mail because of the function of putting the exclamation point (i.e., !) to mark the urgency of the topic. One participant revealed he also put in these e-mails, specific directions such as how many days the recipients have to respond to the e-mail.

All participants used a video conferencing tool. A total of 90% of the participants used Microsoft Teams for video conferencing and the other 10% used Zoom. All participants said they urged the team members to use video conferencing when meeting with their colleagues. Especially when they are working on projects, or the conference is being used to overcome a problem. If it's a project call, sometimes it is important to record the discussions. This ensures the call is documented and can be used as a point of reference if needed later. Microsoft Teams was described by many of the participants as a critical tool. Hargreaves et al. (2022) described Microsoft Teams as an enabler for users to send instant messages, make internal calls, share, edit and collaborate on files and documents in one central, secure location. Adding to the previous description of the positive aspects of Microsoft Teams, Participant A09122023-A01 states "it enables my staff to communicate from any location – via chat, voice, or video calls/conferences." The multiple functions of Microsoft Teams allow the users so much flexibility, including the capability to see if a team member is on a call, available, in a meeting or does not want to be disturbed.

During the interview process, the researcher discovered 90% of the participants stated they use Microsoft Teams and require it for their teams. One of the Participants (P09292023-P01) described the availability indicator as, "knowing when to knock on the virtual door to have a conversation with the colleague." Only 10% use Zoom, which works for video conferencing, but does not have as many functions as Microsoft Teams. The researcher also noticed that Microsoft Teams was mentioned as a tool for placing phone calls if needed to colleagues, (also capable of placing calls external to the organization). The researcher would propose that land line phones have become extinct for virtual teams. In some cases, virtual team members were also provided with a mobile phone for use, if needed.

The emerging theme, the need of sufficient tools for communication, supports research questions 1 and 2. In support of research question 1, the tools are used to collaborate and strengthen relationships of the virtual team members. In many cases the leader has arranged for the tools to be given/installed for the virtual team members to use. This theme also supports research question 2 because these are tools that are used to help not only foster relationship-building but also to continue strengthening the relationship among team members by allowing communication to happen, even when team members are in different parts of the world. Leadership in many cases has implemented processes on how and when to use these tools to help in building relationships and to have ongoing collaboration among the team members.

Theme Three: The Importance of Face-to-Face Interaction to Build Relationships.

The third emerging theme was the importance of having face-to-face meetings to foster relationship-building among virtual team members. This emerging theme supports research questions 1 and 3. In most cases, leaders were already having face-to-face meetings or have planned one for the future. Fifty percent of the participants currently sponsor a face-to-face meeting and 15% have planned for a meeting within the next 12 months. Interesting to realize the participants with team members located globally (in multiple countries) were in this population of the research. The remaining 35% of the participants had team members more regionally located. In the interview conversations, the leaders that had management responsibilities over teams that were located in different countries expressed face-to-face meetings were necessary and as stated by Participant T10032023-T1 “required to have strong relationships and build trust among my team.”

Representation and Visualization of the Data

In this section, the visualization of the data collected and the correlation to the emerged themes realized in this research will be discussed. According to Cloutier and Ravasi (2021), in qualitative research, tables help not only increase transparency about data collection, analysis and findings, but also organize and analyze data effectively. In Table 2 below, a recap of the data collected and its association with the emerging themes and the research proposal is provided.

Table 2

Visualization of Data

Theme	Related interview Questions	Literature correlation	Participant Response
Importance of Collaboration	6, 8, 9, 10	<p>*team leader must create level of collaboration and productivity * team culture, when orchestrated by leadership, better enhances collaboration and overall performance (Ruygrok, 2016)</p> <p>*Ruygrok (2016) suggests it is imperative for leaders to develop a cohesive, high performing culture for sustained daily performance*Effective communication and collaboration must start with the leader.*Cole et al. (2019) suggested collaboration is an essential factor in leveraging team effectiveness.</p>	<p><i>K09202023-K1</i> quarterly town hall meetings with team member presenting and sharing information with the rest of the team.</p> <p><i>L09222023-L1</i> weekly team meeting held on Friday, very casual, I sometimes encourage them to bring a snack.</p> <p><i>U10042023-U1</i> urge team members to collaborate to devise a plan to overcome challenges</p> <p><i>A09122023-A1</i> team meetings allow everyone to be vocal about their thoughts</p> <p><i>B09142023-B1</i> collaboration keeps</p>

Theme	Related interview Questions	Literature correlation	Participant Response
Proper Modes for communication	11	<p>*Proper leadership communication tools and techniques will enhance team trust and relationship-building (Newman et al., 2020). *Equally important is leadership ensuring the proper communication tools are in place for members to form relationships with their colleagues *Hambley et al. (2007) suggest effective virtual leaders need to encourage regular communication and establish various channels to support team communication.</p> <p>*Kligler (2017) advises building the level of trust that is essential to a high-functioning team can be difficult without face-to-</p>	<p>everyone informed helps to develop trust and cohesion <i>L09220203-L1</i> fosters an all for one and one for all environment <i>D09142023-D1</i> We have team meetings every 2 weeks, I share organizational updates, but use the time to discuss topics & challenges the team members want to share with the rest of the team.</p> <p><i>90% responses were MS Teams, email, phone calls</i></p> <p><i>F09152023-F1</i> email, zoom, text messages, mobile phone calls.</p> <p><i>B09142023-B1</i> face-to-face meetings are used for building relationships</p>

Theme	Related interview Questions	Literature correlation	Participant Response
Face-to-Face meetings	5, 7, 12, 13, 14, 15	face time together. *The importance of regular face-to-face meetings cannot be overstated especially from the viewpoint of relationship-based, mindful leadership (Kligler, 2017). Even a one-day meeting can move a team forward dramatically in terms of trust and collaboration in a way which may support more effective virtual work.	outside of work. We get together for birthday celebrations and for the holidays (between Oct. and Dec.) M09272023-M1 currently no face-2-face meetings planned but I know from experience it's the best thing to do when your team is globally located. Hope to start them next year C09142023-C1 We don't have face to face meetings because everyone is responsible for a specific location of the business, The closest to face-2-face is video conferencing.

Relationship of the Findings

The focus of the research performed was to understand leadership's role in fostering relationship-building among virtual team members. The research findings revealed various topics that lead to the accomplishment of this understanding. Qualitative research surfaces new insights that can lead to developing new theoretical models and even new directions of research (Witell et al., 2020). The authors continue by suggesting when adopting qualitative research methods, researchers draw on observations from the data to introduce abstract knowledge. In this section,

there will be a discussion regarding the relationship of the findings in this research to the key areas from the research proposal.

The Research Questions. The purpose of this study was to explore how leadership aids in relationship-building among virtual team members. The key objective was to identify tools and processes leadership uses to build the relationships among the members of the virtual team. The findings of the research support the research questions and give insight into the actions leaders take to ensure relationship-building among virtual team members. The research questions are as follows:

RQ1. What is the leader's role in relationship-building among team members in a virtual team?

RQ1a. What leadership actions defeat relationship-building among team members?

RQ1b. What leadership actions aid in relationship-building among team members?

RQ2. Why is it important for team members to build positive, cohesive relationships with each other in virtual teams?

RQ2a. What are the benefits of building positive relationships among team members?

RQ2b. What are the disadvantages of not building positive relationships among team members?

RQ3. What are the tools and processes used by leadership to aid in relationship-building among virtual team members?

Each interview question was designed to have open-ended discussions with the research participants. The goal was to address the research questions by having a conversation with the leaders of global teams. The emerging themes of the interview sessions helped to identify the actions taken and tools used by management to foster relationship-building among virtual team

members. Table 3 below shows the relationship between the research questions and the research findings.

Table 3

Relations to Research Questions

Research Questions	Related Interview Questions	Analysis of Responses
<p>What is the leader's Role in relationship building among team members in a virtual team. RQ1a - What are the leader's actions that defeat relationship building among team members? RQ1b - What leader actions aid in building relationships among team members.</p>	<p>1, 2, 6,7,12</p>	<p>Most leaders understand their role is to provide opportunities for team members to get to know each other on a work related basis. 80% - conducted team meetings weekly, biweekly, monthly or quarterly; 20% - did not schedule regular team meetings. Of the 20% that did not schedule regular meetings 50% would give team member's opportunities to work on special projects and tasks together to get to know each better. The other 50% did nothing, but felt the members still got to know each other over a period of time at other company functions such as holiday parties. This participant did not think it was important to focus on relationships, but more important to focus on reaching the goals for their territories. This participant also said the team members interact with the people who had responsibilities that overlap, such as those colleagues in customer service. The actions leaders take to aid in building relationships were: (1) face-to-face meetings, (2) virtual round table discussions, and (3) Coffee break chats (likened to a chat at the coffee machine) team members have a short chat 1:1, they are required to do this with each other various times per month.</p>
<p>RQ2 Why is it important for team members to build positive cohesive relationships with each other in virtual teams? RQ2a What are the benefits of building positive relationships</p>	<p>4, 5, 8, 9, 10, 12</p>	<p>The interview participants expressed the importance of building positive cohesive relationships because it will create trust, creates strong bonds, enhances communication, is a platform to learn from each other and adds confidence to the team. Building positive relationships also has impact on individuals such as building</p>

Research Questions	Related Interview Questions	Analysis of Responses
among team members? RQ2b What are the disadvantages of building positive relationships among virtual team members		confidence, feeling they are a part of a team, learn from each other (growth and develop new skills), builds an eagerness for all to succeed. The major disadvantage could be the possibility that a team member does not carry his or her weight, they always look to their team members to solve their problems and don't work to bring solutions to solve the issue.
RQ3 What are the tools and processes used to aid in relationship building among virtual team members?	11, 13, 14, 15	100% of respondents use video conferencing, email, phone (desktop & mobile), Instant messenger. Training and team building activities. 75% of participants held annual or bi-annual face-to-face meetings.

The Conceptual Framework. The conceptual framework that was proposed to support the research consists of concepts, theories, actors, and constructs. The concepts in this study consist of (a) disintegrating forces that pull virtual teams apart, (b) team culture, (c) defining relational and performance expectations, and (d) communication tools that influence team relationships. The theories include (a) relational leadership theory, (b) transformational leadership theory, and (c) servant leadership theory. The constructs in this framework consist of communication and collaboration among the virtual team members, and shared leadership. The actors considered in this framework include (a) leadership, (b) team members, and (c) organizations. This framework aligns with the findings and helps to support the goal of the research. In this section, there will be a discussion of the findings and how they relate to the conceptual framework.

The first focus of the conceptual framework is the concepts. The first concept is disintegrating forces that pull virtual teams apart. As discovered in the discussions with the research participants, there are certain disintegrating forces that can pull virtual teams apart. It is

important for the team leader to understand the importance of not letting these forces impact the development of relationships among the virtual team members. These forces can include (a) time zone differences, (b) cultural diversity, and (c) a lack of face-to-face contact and interaction. These concepts are all critical to avoid for a team to build and maintain a relationship. Many of the participants had team members in various time zones. The locations varied from team members in the United States, with times differences ranging from 1 hour to 3 hours to team members in different countries with a 6 to 10-hour time difference. The leader that understands the importance of ensuring relationships are built among these team members will take the proper steps to foster the building of these relationships. The coordination of team meetings and discussions to encompass all team members is an important task for the team leader.

Not only are time zone differences considered a disintegrating force, but cultural diversity can also be a hindrance to relationships among team members. One trait realized in the conversation with the research participants was the focus on celebrating the cultural differences among team members. One participant shared that during preparation for her team calls, she was careful to notice if there was a cultural holiday soon to come for any of the team members, she is intentional to mention about the upcoming holiday and ask the team member what their plans were to celebrate the holiday. It is a tool she uses to introduce the various cultures represented to the members of the team.

The final disintegrating force that can impact relationship-building is a lack of face-to-face contact and interaction. A large percentage of research participants agree that face-to-face meetings are required to foster relationship-building. These meetings were described by some participants as a necessary time to build friendships and develop trust and cohesiveness. In some cases, the face-to-face meetings contained both team-building activities and opportunities for fun

and games. There were also team leaders that hosted weekly, bi-weekly, monthly, or quarterly video conference meetings to allow for interaction among the team members when they are not face-to-face. Another opportunity for interaction was to assign projects and tasks to multiple members of the team so they have an opportunity for interaction among the virtual members.

Team Culture is the second concept included in the framework of this research.

Evaluating the research participants' description of what is important to them when thinking of a strong team was very intriguing. It was interesting that most participants desired a team culture where each team member felt comfortable with their teammates, felt cohesiveness between them and their colleagues, and wanted to share a common goal of having a successful team. The culture of a team comprises vision, norms and principles and provides initiative for participation; thereby team members get familiar with all such knowledge that formulate the culture of a team (Jamshed & Majeed, 2019). The authors continue by suggesting that team members' behavior and attitude are influenced according to the culture of the team, subsequently influencing team performance. Jamshed and Majeed (2019) further suggested that the culture of the team is one of the significant factors for preventing errors and enhances team outcomes.

The third concept included in the framework for this research is leadership clearly defining relational and performance expectations. The leader of a virtual team has expectations for how the members of their virtual team will work together. By performing the interviews with the participants, it was clear that leadership must be responsible for setting the stage for how the team members perform. Doing this is no easy feat, however, it can be done. The leader must clearly define relational and performance expectations. In one of the interview sessions, Participant (G09152023-G1) revealed that he had held his leadership position for a short time. The company he worked for purchased another company to complement the product offerings to

the markets where they competed. The merger between the team he was traditionally managing and the team from the newly acquired organization. It was not until he sat with the team and communicated his expectations; the two teams did not seem to work together very well. He created opportunities that required the team members to collaborate to find solutions to the challenges. It was through this approach he realized that he had not, in a competent manner, defined the expectations of how the team members needed to work together to be successful.

The fourth concept is communication tools that influence team relationships. The ability to have effective tools for communication is essential for virtual teams. All of the research participants confirmed having the correct tools, such as video conferencing, Microsoft Teams with the capability to send messages and see if colleagues are online, away or in another call. Zoom meetings were also mentioned. The ability to connect team members virtually but use the video capabilities of Zoom and MS Teams was mentioned as a way to connect the team without having to travel for miles to talk. There are three leadership theories associated with this research study: (a) relational leadership, (b) transformational leadership, and (c) servant leadership. Each theory is discussed in this section with a focus on how the theories were represented in the research interview process.

Relational leadership is the first theory to be discussed. There are two perspectives of relational leadership one is the entity perspective, and the other is relational perspective. The entity perspective focuses on identifying attributes of individuals as they engage in interpersonal relational perspective and the relational perspective focuses more on the leader's integrity and sense of responsibility. In the interaction with the research participants, who were all leaders, the researcher witnessed the presence of the relation perspective. The researcher noticed the participants all showed a level of responsibility for the development of relationships among team

members. It was interesting that the majority (90%) expressed the need to actively create opportunities for team members to interact and only 10% felt this would happen organically, much like with collocated teams.

Pertaining to the entity perspective, there was a point when the leaders started to notice changes in interactions among the team members as those interpersonal relationships were being formed. Especially with Participant G09152023-G1, where this leader was responsible for integrating a team comprised of members from separate companies joined because of a business merger. The initial introduction was just names and general information, such as how long they had been with the company, and a few personal facts about themselves. As days passed during the one-week workshop, the familiarity and comfort level became apparent to most of the members of the newly formed team. The relational leadership theory, and the entities associated, focus on the actions and behaviors of leadership, supporting the idea that leadership has a role in fostering relationships among their team members.

Transformational leadership theory was the second theory of the research framework. This leadership approach is usually reflective in the leader and their ability to be effective. The leader is responsible for the team members' ability to adapt to certain behaviors. As part of the framework for this research, transformational leadership theory consists of four leader dimensions: (a) idealized influence, (b) inspirational motivation, (c) intellectual stimulation, and (d) individualized consideration. There were many discussions during the interview process where leadership discusses that one or more team members were apprehensive about giving their input on topics. Displaying idealized influence, the leader had to find ways to motivate and influence this team member without singling them out. Participant N09272023-N1 gave an

example and explained this is the type of team member she will put into a situation where it is necessary to collaborate and become a part of a smaller team first.

It helps to grow confidence and a feeling of belonging and making an impact according to this research participant. Many participants displayed inspirational motivation in their description of how they created opportunities for their team members to collaborate and a bond with each other where they felt comfortable reaching out to their team members to assist when they were faced with challenges. Although there were no direct questions pertaining to individual consideration, there were references to intellectual stimulation, another component of transformational leadership. Participant A09122023-A1 discussed how there was team members that were nurtured to reveal talents and capabilities that were not utilized, preparing them for growth and confidence to explore opportunities within the organization. Somewhat complimentary to individualized consideration, another part of transformational leadership theory, where the leader took interest in the individuals needs to enhance their ability to excel in the organization.

Servant leadership theory is a part of the interview process where the researcher did not ask questions to the interview participants about servant leadership, instead looked for characteristics of the leader and their responses that represented servant leadership. The researcher found this to be an important characteristic of a leader and looked for evidence that this existed. The leaders that were careful to recognize when their team members didn't seem to connect quickly with the other team members, those who created special circumstances for the team members to interact, and those who expressed a balance between when to get involved in challenges the team member faced versus when to allow the team member to gather and resolve

the challenge themselves exuded servant leadership. The servant leader focused on the goals and success of the team members first, before their own and before the organizational goals.

The next part of the research framework was the constructs. The constructs consist of the communication and collaboration of the virtual team members, and shared leadership. It is interesting that communication and collaboration were identified as one of the emerging themes of this research. With these items already in focus for the research, it was interesting that it was also important to leadership of the many organizations that were represented in the research. The leaders in the research were all focused on the importance of proper communication and ongoing opportunities for collaboration among virtual team members. Participant A09122023-A1 revealed it was important for the team members to interact with each other when there was little to talk about, meaning not any major problems or challenges facing them; therefore, making it easier to collaborate when they were faced with major problems. Team leader and Participant L09222023-L1 created what was called a coffee break; it was an opportunity for the team members to reach out to their colleagues and schedule a short 15 to 30-minute meeting just to catch up with their fellow team members. This was compared to meeting each other in the breakroom first thing in the morning when getting the first cup of coffee for the day. The only rule that was set forth was that the camera had to be on when using MS Teams for this interaction.

From the perspectives of the research participants, shared leadership was viewed to be created organically. This was another part of the constructs which made up the framework of the research. Several participants discussed that sometimes the team members were making decisions together splitting the tasks to accomplish the needed goals. This type of leadership

emerges once the team has built a level of trust. Six participants suggested this is an indication that relationships are developing among team members.

The actors, as suggested in the research framework, are essential to relationship-building. The actors are the individuals serving in the leadership position, the team members, and the organization. The leader must recognize there is a need for relationship-building and facilitate the creation of opportunities for relationship-development among team members. The team members must be willing to be a productive part of the team. The team members must be willing to be vulnerable enough to allow relationships to be fostered by the leader, be willing to work to be a part of the development process. Of course, the organization must support the needs of the virtual team and allow a culture that supports face-to-face meetings and team member growth and development.

Anticipated Themes

Prior to performing this research, the researcher anticipated there would be emerging themes. The anticipated theme was that leadership would not really focus on relationship-building if the performance resulted in meeting the goals and priorities of the organization. The overarching theme revealed during the research is that many leaders care about the relationships among their team members and work to develop and build these relationships. Also, the anticipated theme prior to performing the research was the processes for developing and building relationships among virtual team members did not exist. The researcher can confirm that the participants in the research had no blueprint for how to develop relationships among virtual team members. There were 20% of the participants who stated they had measurable key performance indicators (KPIs) that can give an indication of successful collaboration among the team members. Another 20% utilized feedback from customer surveys. Many of the research

participants thought it was important for team members to have relationships, both work-related and, in some cases, beyond work. Participant U10032023-U1 stated “there is no way to measure, it’s just a gut feeling for me, I can just sense when the level of collaboration and cohesiveness has increased among my team members.”

The Literature

The review of professional and academic literature represented an extensive inquiry into the role of leadership in building relationships among team members, especially where virtual teams are involved. In the literature review, there is a focus on the abilities the leaders possess to ensure their team’s success. The focus of this research pertained to the leaders in the medical device industry, therefore, there was attention given to topics pertaining to this industry in the literature review. The findings in the research carried both similarities and differences to the research findings during the evaluation and assessment of each research participant. In each interview session, the researcher evaluated the responses of the participants, paying careful attention to the tone of their voice when discussing certain questions. Each participant had stories to share about their experiences leading virtual teams. The interesting part was the passion and compassion that each participant shared about their support of the team they led.

Angelo and McCarthy (2021) suggested that large employers are utilizing teams where members are dispersed geographically, with the goal of enhancing the productivity of the group. There were 8 participants that manage teams located in multiple countries, and the ability to have almost 24 hours of activity for the team was one of their strengths. This was examined in some of the interviews with the participants. For example, Participant F09152023-F1’s team is located in the United States, Germany, India, and Sweden. While it is sometimes difficult to coordinate meeting times where everyone has availability, the strength of the team is the ability to have

presence globally and if one team member in the United States was looking for particular resources, the team member in the other countries could research for potential resources in their perspective country. The literature in the research shows this as a strength and benefit of such a team. The advantages shown in the literature included flexibility with respect to geography and timing, economic benefit, and the savings on travel.

The literature reviews the behavioral complexity in leadership (BCL) theory, namely Quadrants III and IV. Wakefield et al. (2008) described Quadrant III as accentuating control and stability within a group for which the leader is responsible, and Quadrant IV focuses on human relations. While Quadrant III sets the tone for leadership responsibilities, Quadrant IV is focused on the interactions between the members of the virtual team. Both quadrants point to the importance of both quadrants and the success of the virtual team. In the research, this is apparent and supports the literature input. The researcher found that the teams that were more interdependent seem to add more to the success of the organization. Many participants confirmed this in their interview session.

Participant L09152023-L1 suggests the interdependence among the team members allow for coverage when one team member is not working, and challenges need to be addressed and problems need to be resolved. The participant's response also supports Wakefield et al.'s (2008) suggestion that if this interdependence does not exist, the consequences could be a lack of development of relationships among the members of the team.

Time zone differences were discussed in the literature as one of the limitations of building relationships among virtual teams. Mell et al. (2021) suggested with the growth in utilization of global teams, dispersion of team members across multiple time zones limits opportunities for synchronous interaction. In the research, the participants with teams in various

time zones did not see this as a limitation, but as an advantage. Several participants shared the utilization of having members in different time zones, adding competitive strength to the team. The leader of the team must have an active role in developing the relationships among the team members, but one familiarity is developed among the members, and the trust that each member is capable of covering for each other, the team can use the time zone difference to their advantage.

Cultural diversity adds another dimension to developing relationships among team members. Literature alludes to this diversity including different languages, cultures traditions, values, and identities (Stratone & Vatamanescu, 2019). Shachaff (2008) suggested cultural diversity makes the virtual team more complex, increases conflict and confusion. The interviews with the participants who lead these culturally diverse teams have given an indication that much progress has been made with managing culturally diverse teams since the input from the writing by Shachaff (2008). Stahl and Maznevski (2021) posited diversity can be a source of friction and conflict, therefore an obstacle to effective team performance. Again, this does not seem to be supported by leaders of culturally diverse teams.

Participant H09182023-H1 uses this as an effective way to create interest in learning more about each other. He explained sometimes his approach to starting team meetings is by talking about a particular holiday that one culture may celebrate, and others do not. This often leads to conversations among the team members, therefore, building trust.

The leadership theories in the research literature were important to understanding the benefits of building relationships among team members. Many of the research participants explained how the relationship-building process has shown qualities of the team members that may not otherwise be recognized. The leadership styles were discussed in the research proposal to point out the importance of leadership roles in relationship-building among their team

members. These leadership theories are transformational leadership, relational leadership, and servant leadership.

Transformational leadership helps to facilitate the building of relationships. Relational leadership leads to the display of empathy for the members and is recognized as a component of organizational transformation. Servant leadership theory is suggested as a concept that promotes integrity and self-confidence and focuses on discovering the full potential of the employees. Subordinating an organization's goal to employee's goals, servant leaders help employees achieve their goals in the process help the organization achieve its goals (Khan et al., 2022). In the open-ended conversations with the contributors to the research, it was clear where the characteristics of servant leadership were present. There were statements such as, "During the process of bringing my team together, I was interested in how they were doing as well as how they felt I was doing" (Participant G09152023-G1).

When performing the interviews, several research participants spoke about the importance of trust among the team members. Trust is important because it enables individuals to develop shared perceptions and expectations (Agbejule et al., 2021). This was also a term used during the interview when talking about developing cohesiveness. Prabhu and Modem (2023) suggested team trust facilitates autonomy and workplace spirituality and helps develop connectedness among team members. Agbejule et al. (2021) suggested that trust is a foundation of team-learning and can facilitate cooperation and create a favorable climate for the team. There are many team characteristics that emerge when a relationship is built among the team members, and trust is one of them.

The Problem

In any organization, leadership has proven to be a pivotal part of the success or failure of the company. In recent years, leadership responsibilities have transitioned from overseeing a group where there is face-to-face communication daily to overseeing a team where members are not co-located. Team members develop a relationship with the leader and their colleagues organically due to the daily interaction. In the study, the researcher wanted to address the new challenges of leadership, due to the migration of many companies from face-to-face to virtual teams. The general problem addressed is the failure of leadership to aid in relationship-building among virtual team members. The findings in the research is there are many leaders that understand the importance of virtual team members forming a relationship, but this does not happen organically, it has to be fostered by leadership which is the foundation of having a virtual team and not just individuals working on their perspective tasks to achieve the goals that are set forth by management.

In this study, the researcher has identified three key findings that are necessary for management to aid in the building of relationships among team members. The necessary attributes that management must ensure are present to aid in relationship-building among their virtual team members. The first theme is the importance of collaboration. When teams must collaborate, facilitating it becomes a critical concern for leaders (Newman & Ford, 2021). Most research participants (18 of the 20) agreed it was the responsibility of the leader to create opportunities for the team members to collaborate. In most cases, the leader coordinates weekly, bi-weekly, monthly, or quarterly meetings with the team and allows an opportunity for each team member to have input on the topics. Most participants communicated, during the research interview, the importance of the team members having relationships, but never really had an

outline or direction on how to do this. Their ability to build a cohesive team was mainly through trial and error and having years of experience. Participant F09152023-F1 suggested there are no step-by-step guidelines to how to aid in relationship-building for virtual teams, but here is one thing I do:

In order to get the team members accustomed to sharing with their colleagues.

I have a session at the beginning of each meeting. I titled it '90 seconds of what's keeping me busy.' Each team member is given 90 seconds to share what tasks they have been working on. I don't interrupt, because it usually leads to other team members asking questions and getting more details. Occasionally, the discussion would lead to discovery that two members are having the same challenges and this is where the collaboration and teamwork starts.

There were discussions around the team leaders creating opportunities for the team members to have meetings without the leader present. Participant L09222023-L1, shared that she created a "coffee break" meeting for the team members to have brief calls, usually 15 to 30 minutes to just chat. It could be about work, or not, as long as they were spending time getting to know each other better.

I developed the coffee break idea during the pandemic. It seemed we were all working so hard, but I could feel the tension and fatigue during our virtual meetings. There was no way to plan a team get together because it was not allowed during this period. So, I thought of this idea to kind of have mini sessions with my team members one-to-one just to make sure they were handling work and doing okay handling the COVID-19 situation. I got very positive feedback from the team on our one-to-one meetings, so I suggested

they schedule the same type meetings with their team members. I laughed and said we all need a “coffee break” and that’s how the idea was born.

The second theme that pertains to the problem is the importance of strong modes of communication to give each team member easy access to his/her colleagues. As poor communication is an important factor hindering the successful operation of virtual teams, if team members can achieve a state of being familiar with each other’s work requests and expectations and can understand each other without saying much, the operational efficiency of virtual teams is likely to be improved (Zhang et al., 2022). When discussing the modes of communication with the participants, the consensus was 100% for the use of emails and 100% for the use of video conferencing (90% MS Teams and 10% Zoom). Leadership is responsible for ensuring that team members have access to these tools and that each member has training to properly use those tools that he/she is not familiar with.

In the research there was no discussion regarding if the team leader had any input on selection of tools used by the team to communicate with each other, or if the organization provided certain tools and the teams had to adapt to them. The focus of the research was to understand what tools were used and how they were used, not who selected the tools or which tools were more useful.

Summary of the Findings

The focus of this research project was to understand how leadership aids in building relationships among virtual team members. A qualitative research study was conducted using a list of 15 open-ended questions posed to 20 participants to understand the role leadership plays in helping to build relationships among their team members. There were themes that emerged

during the process. The themes emerged during the interview process, the coding, and the translation process. There were three themes that emerged, and they were as follows:

1. Collaboration is Important to Building Relationships
2. The Need of Sufficient Tools for Communication
3. The Importance of Face-to-Face Interaction

The three themes mentioned above are critical for leadership to aid in relationship-building among team members. The first theme to be discussed is the importance of collaboration in building relationships. In virtual teams, it is the leader's responsibility to create and support opportunities for collaboration. There was a level of understanding and supporting this finding with the research participants. Relationships must be built among virtual team members because of the dispersion of the members, unlike co-located teams who come face-to-face each day. In the case of co-located teams, these relationships are often developed organically; however, this doesn't usually happen for virtual teams. The responses that were provided regarding collaboration and leadership developing opportunities for collaboration were very revealing to how it related to the problem.

There were some responses to the research that suggested that collaboration not only benefits the team, but also benefits the individuals. The benefits of collaboration for the team, as discussed with research participants, are (a) the team members grow closer to each other (bonding), (b) it enhances communication, (c) the team members learn from each other, (d) trust is built among the team members, and (e) a high level of confidence is built among the members. These characteristics will develop as a result of leadership aiding in relationship-building among the team members. The benefits for the individuals include (a) increase in confidence, (b) feeling of belonging and being part of a team, (c) feeling the support of a team, (d) a desire or eagerness

to succeed, (e) development of problem-solving skills, and (f) personal growth. All of these individual benefits will result in a more successful team. Collaboration was also key in problem solving for the teams. All participants agreed that through collaboration, resolutions for problems can be developed.

The emergence of collaboration supports the research question RQ1 which is focused on the leader's role in relationship-building among team members. The leader must create a platform for this collaboration. It is the responsibility of the leader, at least at first, to set an example for how to get multiple team members involved in problem-solving. Some leaders, during the interview process, revealed they created opportunities for the team members to have open discussions and give their opinions on certain topics that would help to solve problems and challenges posed to their colleagues. Creating a safe space for the team members to discuss and give their opinion on topics.

The general purpose of this qualitative multiple case study was to highlight the methods and tools used by leadership to aid in relationship-building among virtual team members. In this case study, the focus was on developing opportunities for relationship-building among virtual team members, and developing the platform for collaboration among team members helps to support the purpose of his research. Revealed in the research was the confirmation that collaboration is a method that leadership is using to develop team relationships. The use of collaboration is used to overcome problems and challenges, it's used to build trust and cohesion among members, but most importantly it is used to build relationships among team members.

The second emerging theme was the use of proper modes of communication among the team. Questions regarding how the team leader ensures the team members can accurately communicate no matter where they reside, even if they reside in different countries or different

time zones. All of the research participants touted the use of email, utilizing different functions of email to ensure the communication was happening adequately. The concern for this topic was whether the cultural differences had an impact on the comprehension of the message sent by email. This topic could possibly be another area to research in the future. In most cases, the open-ended questions posed to the research participants led to multiple sub-discussions.

Other sources of communication were video conferencing, which was noted as utilized by all research participants. Interesting to note, no participants revealed a preference of using the video capabilities over audio capabilities of their preferred video conferencing tool but thought the use this tool was necessary to build relationships among virtual team members. The use of video conferencing was thought of as the next best thing to being in the same location as the team members.

The use of Microsoft Teams and all of the functions that are included in this system was a highlight of many of the team leaders. Microsoft Teams was used by the majority of the leaders who participated in the research. The function of sending an instant message to the colleague, unlike sending an actual email, is a swift way to send a short message to one of the colleagues to get a quick response. Also, the status function of Microsoft Teams, that indicates if a colleague is busy, in a call, in a meeting, doing a presentation, or out of the office, was a strongly supported tool which the research participants touted as the virtual office tools that indicated if a colleague was available to answer questions or have a brief discussion.

This emerging theme supports Research Question 3 (RQ3) which addresses tools and processes used to aid in relationship-building among team members. Another tool discussed was the use of the cell phone. These tools are all used to support the virtual team as modes of communication. With the onset of Microsoft Teams, it is easier for virtual team members to have

discussions compared to walking to the office next door to ask a colleague a question or to get their input on a topic.

The third emerging theme represented in the research was the importance of face-to-face meetings. Referring to Research Question 2 (RQ2), which focuses on team members having positive cohesive relationships. Most of the research participants (50%) already hold face-to-face meetings and another 15% have plans to start having face-to-face meetings in the next calendar year. Thirty-five percent (35%) of the participants who do not have face-to-face meeting and do not have plans to start them. Many of the participants suggested face-to-face meetings were the pivotal device to start building relationships among the team members. There was a consensus among the participants that for virtual teams, face-to-face meetings were necessary. Although seeing faces on video conferencing was a good makeshift way to have faces present, it's seeing the colleagues in person that adds to the richness of the face-to-face meeting. One of the research participants shared that year-after-year when the members meet face-to face; this is where growth, trust, and cohesion are validated.

In conclusion, the researcher suggests that the growth of virtual teams within organizations has made it necessary for team leaders to adapt to a management style that includes aiding in the building of relationships among their virtual team members. The leader must be the person responsible for giving the team members the necessary tools and platforms to develop these relationships. As a result of the research findings, it has become evident that the virtual team's ability to be successful hinges on how leadership chooses to help in developing relationships among team members. Collaboration, the correct tools for communication, and having face-to-face meetings are key aspects for leadership to make it possible to develop and

ultimately maintain relationships among the team members to contribute to organizational success.

These emerging themes are very widespread and could probably each be researched at more extensive levels to realize and capture the impact on virtual teams. Collaboration, according to research conducted, impacts other aspects of relationship development. It helps to develop cohesiveness, build trust, create stronger bonds, enhance communication, and adds confidence to the team. But also has an impact on each individual member of the team, which also benefits the team. If an individual team member does not easily assimilate with the team, or if the individual is a new employee, participating in the collaboration can help them to learn and develop strengths that will be needed to successfully perform at their new job. If the correct tools for communication are not utilized, there might be a lapse in the transfer of important information that is needed to share with other team members to complete a task. Having quick access to other team members, such as the use of texting on the mobile phones, using instant messenger or status function of Microsoft teams are excellent tools for communication among virtual teams. Having scheduled face-to-face team meetings whether it's for one day, or one week, is critical to the development of relationships. The occasional online meeting does not suffice for growing cohesion and developing a relationship with fellow team members. Leadership must be intentional about ensuring the opportunity for relationship development among virtual team members.

Application to Professional Practice

As a result of this research, the outcome can be applied by leaders of virtual teams in various industries. This section will focus on topics that will aid in implementing these themes in an environment where virtual teams exist. The discussion will first focus on improving general

business practice. Next, the focus will be on potential application strategies and the concluding focus will be on potential application strategies.

Improving General Business Practice

Virtual teams have become important to organizations. For some organizations, rethinking leadership has required transitioning from a physical to an entirely virtual work environment (Greimel et al., 2023). Leading a virtual team requires leadership to understand how each team member is functioning, thriving, and coping with working in an environment that does not include the ability to collaborate face-to-face with their co-workers. The leader must recognize that having a team with members dispersed in different locations each member may require something different from the leader. The leader must also recognize the team members need to interact with their colleagues to develop relationships and perform as expected of a team. In this study, the research has identified emerging themes that are critical to leadership fostering relationship-building among their virtual team members. These themes can be incorporated into the development of more cohesive virtual teams with the same level of relationships as a co-located team.

Theme One, The Importance of Collaboration, if focused on by leadership, and can aid in relationship-building among team members. According to Orae et al. (2019), collaboration is indispensable in the successful execution and delivery of any type of project, especially for virtual teams. The authors continue by suggesting encouraging collaboration and collaborative team culture are among the primary responsibilities of the leader. The research participants all noted the importance of collaboration and suggested various ways to ensure collaboration happened among the team members. Of the 20 leaders interviewed, 12 of them agreed that collaboration offered the opportunity for the development of trust and bonding among the team

members. All participants agreed that collaboration is a key approach to addressing problems that team members may be confronted with. To improve the lack of collaboration that may exist among team members, the leader of the team must be careful to develop efficient and effective opportunities that drive the need for collaboration.

Theme Two, The Need of Sufficient Tools for Communication, must be at the forefront of relationship-building among virtual team members. Leaders of virtual teams must understand the importance of having the correct communication tools available for their team members. When in a virtual environment, team members have to be able to communicate with their colleagues. This is possible, of course by e-mail, or by the desk phone. However, if team members need to have a conversation with their colleagues on an urgent topic, e-mail may not be the most efficient mode of communication. There are many products available that allow for communication among virtual team members. Leadership has to decide what works best for the team. The use of Microsoft Teams was a popular choice among the participants interviewed for research. MS Teams allows team members to communicate by sending an instant message (IM) via computer that alerts the receiving party immediately, this product is also used to schedule meetings and to have conference calls via audio or by using the video function. In some cases, organizations supply mobile phones to their virtual team members for use in business communication. Of course with the use of the mobile phone, the team members can text their colleagues which allows for immediate response and communication.

The Third Theme, The Importance of Face-to-Face Interaction to Build Relationships, is one of the leader's most critical responsibilities when fostering relationship-building among team members. In this research, 75% of the participants held face-to-face meetings with their team members at least once per year. The use of time during the face-to-face meetings varied as

explained by the research participants. Participant A9122023-A1 organized for the team members to have lunch together one time per quarter. The topics of conversation are not necessarily work-related, but it is an opportunity for the team members to have face-to-face conversations. The leader takes this opportunity to acknowledge team members who have upcoming birthdays and anniversaries. There is a special recognition for those employees who have completed milestone work anniversaries. The company gives a token of appreciation, and it's presented during the luncheon. The leader also mentioned a couple of times per year there will be an evening event, usually around a major holiday. The team members for this leader worked virtually but were located close enough to be able to drive to a central meeting place to have lunch or dinner.

Other research participants approached the face-to-face meeting quite differently. Participant G09152023-G1 shared that during the interview, his team members were located in multiple countries and time zones. Face-to-face team meetings are held 1 to 2 times each year in an offsite location. These face-to-face meetings usually last 3-4 days and are filled with team-building activities, training sessions, and from time-to-time an external speaker will be invited to present a topic that pertains to the organization. Depending on the location of the face-to-face meeting some members must travel long distances for the meeting. These meetings are a cost to the organization, but as explained by Participant G09152023-G1, they are intentional because of the importance of the team members getting to know each other and building a bond that allows them to feel comfortable with working as a team even though there are great distances between the team members.

These previously discussed ways to enhance relationship-building as a leader of a virtual team are examples of approaches to improve business practices. The leader must set the tone and

provide the opportunities for relationship-building to happen. The researcher has, through the research interviews, confirmed the importance of the leader arranging for team members to meet face-to-face from time to time to develop and strengthen relationships among virtual team members.

Potential Application Strategies

A leader of a virtual team, whether newly formed or an existing team, must ensure the team members build cohesive relationships. This research has revealed three emerging themes to assist leaders with ensuring relationships are built and maintained among their team members. A leader with the desire to use some of the approaches discussed in this research would need to form a strategic approach to refrain from implementing an overwhelming change to the current work and information flow, potentially causing problems with the team.

Theme One, The Importance of Collaboration, is important for the success of virtual teams. Ābeltiņa and Rizhamadze (2021) suggested team leaders are responsible for promptly establishing a team that operates well together therefore they must create the proper context and organizational structure. The responses from the research participants revealed the necessity of aiding in fostering relationships among their team members. For example, interview Participant K09212023-K1 revealed he schedules town hall meetings with all team members and asks one team member to bring something he/she is having struggles with to present to the rest of the team members. The members are encouraged to ask questions to get the best understanding they can of the problem. Then they are to all collaborate and offer suggestions on how to best approach the problem. Many times these conversations continue after the town hall and ultimately the team helps the individual to develop a solution for the problem. Much like this leader, any leader who desires to foster relationship-building among their virtual team members must create

opportunities for the team members to collaborate. If a leader wants to implement hosting an interactive town hall, he or she should plan the first one and in the first meeting prepare to facilitate and present. With each reoccurring town hall, start to transfer the responsibility to the team members. For example, perhaps in the third call ask a team member to prepare a presentation to discuss a topic (perhaps to discuss a problem they may be faced with. By this time, the third call, the team members should be settling into how the meeting should be run and starting to collaborate on the topics that are included in the meeting.

Theme Two, The Need of Sufficient Tools for Communication, is as simple as it sounds but should be confirmed by the leader. The confirmation of the implementation and availability of the communication tools is the first step for leaders. Possibly the leader will have to perform their own research on the availability of the tools. Audio and video conferencing tools play an essential role in the functioning of virtual teams (Ābeltiņa & Rizhamadze, 2021).

Theme Three, The Importance of Face-to-Face Interaction to Build Relationships, requires the most coordination on behalf of the leader, especially if the team members are located in different time zones or countries. The leader must first of all decide the type of meeting that should be held. There are many options. Some of the options represented by the research participants were workshops where team members come together to learn new processes and gain knowledge to help improve their performance as a team. Others organized a face-to-face team meeting which required some members to travel long distances and the meetings lasted for 3-4 days. In these meetings, there can be team-building activities, training, workshops, or lectures from an expert in a certain field. There are also opportunities for non-work related activities in the evenings to also help to foster relationship-building.

The above-discussed options for applying the emerging themes to a virtual team's way of working for the leader to aid in fostering relationship-building among their team members require the leader to develop a plan for implementing the changes, if the team currently exists but just needs to refine their current relationships. If the leader is developing a new team, the strategic approach should be focused on when to implement and start to focus on collaboration, communication, and face-to-face meetings. These emerging themes are important to incorporate in either situation. This approach will help the leader to ensure relationships will be built among the virtual team members.

Summary of Application to Professional Practice

As the existence of virtual teams becomes more and more prevalent in organizations, relationships must exist among the team members. Leadership has the responsibility to their team to ensure that relationships can be developed. In this research, the research participants, all leaders of virtual teams, openly discussed the tools and tactics used to help foster relationship-building among team members. Three emerging themes proved to be critical for leadership to ensure the team members were given ample opportunity for these relationships to develop. These emerging themes are an indication that leaders understand the importance of relationship-building among virtual team members. The themes are (a) the importance of collaboration, (b) the need of sufficient tools for communication, and (c) the importance of face-to-face interaction to build relationships. The emergence of these themes reveals that leaders who currently lead virtual teams understand they have a responsibility to create opportunities for their team members to build relationships. The feedback from the leaders during the research interviews also revealed there are no industry standards that dictate how to implement relationship-building among team members. Each leader had their own approach and their own process.

Recommendations for Further Study

In the process of analyzing the data and concluding the findings, opportunities for further study were identified to understand if additional results could be determined. First, it is the recommendation for performing this study across multiple organizations from different industries. This research focused only on organizations that were in the medical device industry and the organizations had a presence in the Charlotte, NC metropolitan area. It would be interesting to see if leadership has the same approach when leading virtual teams in other industries. The medical device industry is regulated by governing bodies such as the Food and Drug Administration (FDA) and therefore the requirements for qualifying products to be sold are very strenuous. It would be interesting to see if the differences in industries would yield a difference in research outcomes.

The second recommendation would be to consider the size of the virtual team. It would be interesting to understand if the size of the virtual team has an impact on how management approaches relationship building. The maximum size of the teams represented in this research was 15. However, the size of the team was not considered or analyzed in this research. Possibly if leadership has a larger number of virtual team members the approach to relationship-building could be different.

Finally, using the same research approach (including research questions, interviews, and analysis) in a wider geographical area, would the outcome be the same? It would be interesting to understand any variances in the results if the geographical area was wider than just the Charlotte, NC metropolitan area. Even more interesting would be to include management from various countries and cultures. The approach would include evaluating managing virtual teams

that reside in various parts of the world if relationship-building is approached in the same manner, and if the emerging themes would be the same as shown in this research.

Reflections

This research focuses on the role of leadership in fostering relationships among virtual team members. Virtual teams have become an important part of organization providing the company with better adaptability and flexibility (Sedrine et al., 2021). The authors continue by suggesting the absence of concrete face-to-face interaction in the virtual teams gives the leader a more decisive and stronger role which exceeds the classical practices of a traditional team leader. The researcher interviewed 20 participants who served in leadership positions on virtual teams. The 15 interview questions were open-ended allowing the participants to elaborate in detail on their approach to leading a virtual team and ensuring the virtual team members can build relationships with their colleagues, also located virtually. The completion of the research, allowed the researcher to identify emerging themes that helped to support the necessity of leadership taking a role in fostering relationship-building among the team members.

Personal & Professional Growth

Embarking on this research project has awarded personal and professional growth to the researcher. The opportunity to hear the perspective of many leaders of virtual teams, the researcher gained an understanding of the many challenges of leading a virtual team. With previous experience as a leader of a co-located team, the researcher now has a different perspective on leadership responsibilities, especially about a virtual team. It became clear in this process that leadership values the existence of relationships among their team members is important to build trust and dependency among the group.

Scheduling the interview sessions with the participants was an experience within itself. In some cases, finding a time and date for the research interview sessions was a difficult task. Coordinating the interview with the participant's schedule was, at times, a challenge. The researcher found that the participants sometimes had to reschedule due to unforeseen issues that would arise. In one situation, the participant's schedule changed, and was going to be at the airport during our scheduled interview session. Keeping in mind that the participants' identities were kept private, the researcher could not risk someone overhearing the conversation and identifying the research. This session was delayed by 7 days and rescheduled when the participant was able to be in a less public location. Personal growth was realized in this process because the researcher had to realize that sometimes actions cannot be controlled, and it can become necessary to adjust with little notice. The researcher did not originally anticipate scheduling the interviews to be a challenge.

The researcher also realized that, depending on the location of the team members, some leaders have a very specific time of availability. The leaders that had team members located in various time zones had to schedule their interview sessions around the time they had to be available to support the members of their team. This was a moment of professional growth because the researcher realized how these leaders had to allocate parts of their day to various team members, depending on the overlap of their workday. If the team leaders were having meetings with their team members located in different time zones, the leader had to be mindful of this when scheduling a meeting to participate in the research study.

The forum for discussions with the research participants was through one-on-one interviews. There were 15 open-ended interview questions which allowed the discussions to go in many directions. The leaders were transparent in sharing information about their experiences

serving in the leadership role. Very interesting to the researcher were the descriptions given by the research participants of their team dynamics. The level of excitement shown by the research participants to have the opportunity to share information about their team and to have potential input on a topic that would possibly help mold the future of organizations with virtual teams.

Biblical Perspective

The idea that business has any connection with biblical perspective may seem farfetched. Pruzan (2008) suggested the concept of spirituality in business may appear to be an oxymoron. However, in the research performed discussing with leaders how they foster relationships among their virtual team members, carries similarities with stories in the bible. The virtual team leader must be bold enough to create opportunities for the team members to come together, has to be wise enough to recognize when to intervene, and has to be sympathetic enough to know what each team member needs to be successful. In the book of Joshua, the first chapter, the story of Joshua being installed as the leader after the death of Moses, there is a reference to God speaking to Joshua and reassuring him that He was with him. Even though the promises of God were with Joshua, "I will give you every place where you set your foot, as I promised Moses" (Joshua 1:3, NIV). "I will never leave you nor forsake you" (Joshua 1:5, NIV). One could imagine Joshua was still nervous and afraid. The leader of a virtual team probably has moments like Joshua, where it seems everything will be okay but, there are still doubts because of the unknown. The boldness must be present to move forward with the task of ensuring relationship-building is happening between the virtual team members.

The researcher also noticed the presence of servant leadership during the interview process of some of the research participants. The biblical work instructs (Philippians 2:3, NIV), "Do nothing out of selfish ambition or vain conceit. Rather, in humility value others above

yourselves.” Servant leaders, according to Zada et al. (2022), are positively related to task performance in a virtual team environment. Furthermore, servant leadership can psychologically empower the employees by enhancing their strength, commitment, and contribution to the organizational goals and recognizing their ideas to accomplish and execute tasks in virtual team settings.

Leadership showing characteristics of a servant leader will put the needs of their team members before their own. In many instances, the research participants showed the characteristics of servant leaders. The researcher witnessed some of the leaders, during the interview process, still attending to the needs of their team members even during the interview. The servant leaders showed compassion towards their team members and wanted to ensure the team members had everything they needed to be successful in their positions. "Everyone should be quick to listen, slow to speak, and slow to become angry because human anger does not produce the righteousness that God desires (James 1:19-20). This is an effective description of the characteristics of a servant leader who serves his team before himself. Servant leadership reflects the leader's productive attitude toward task accomplishment and performance.

Interacting with the research participants, hearing the leaders' passion for overseeing their team members and ensuring their success, and recognizing the compassion the leaders had for their virtual team members, the researcher was reminded of the scripture Colossians 1:3-4 (NIV), "We always thank God, the Father of our Lord Jesus Christ, when we pray for you because we have heard of your faith in Christ Jesus and of the love you have for all God's people." The leaders exuded a level of caring about the well-being of their team members, even when considering how they interact and relate to their colleagues.

The biblical perspective of leadership in virtual teams, especially when they are focused on relationship building among the team members indicates that the leader has to serve the team using biblical principles. These principles must be focused on serving the team, providing for the team, and ensuring the team has everything needed to be successful in their functions. The task of helping to foster relationship-building. The biblical perspective, although not a focus of this research, was demonstrated by the efforts of the leadership to manage the virtual teams and the willingness of the leadership to provide the necessary tools to maximize the potential for the virtual team's success.

Summary of Reflections

The idea of researching the role of leadership in relationship-building among virtual team members was to close the gap in the literature on this topic. The process of completing this research allowed the researcher personal and professional growth because the information revealed the requirements for leaders to accomplish this goal. It would appear that leadership could easily accomplish this goal by allowing the team members to accomplish their daily tasks. However, the need for a larger effort by leadership to achieve this goal was overwhelming to the researcher. The results of this research provide steps that must be taken by leadership to ensure success in this area. The leader must possess characteristics much like a servant leader to ensure the team members have all the tools and opportunities needed to build relationships with their colleagues. The findings validate leadership must take an active role in ensuring relationships are built among the members of their team.

Summary of Section 3

The purpose of this research was to understand the role leadership plays in building relationships among virtual team members. The general problem to be addressed is the failure of

leadership to aid in relationship-building among virtual team members. The research included 20 leaders of virtual teams from medical device companies. The researcher developed a listing of open-ended interview questions that were the basis for the interviews. These questions allowed the leaders and the researcher to have conversations that revealed the approach that each leader took to ensure relationships were formed among the team members. There were a high percentage of research participants creating opportunities for collaboration among the team members. The research did, however, have emerging themes that focused on the tools or processes needed to ensure the relationships were built among the team members. Section 3 gave an in-depth view of how the leaders, in the targeted research group, responded to the interview questions and displayed the processes and tools used to help build relationships among the members of their virtual team.

Section 3 also includes recommendations for future study, areas where this study can be expanded to better understand and develop an approach for building relationships among virtual team members. This study was limited to one sector and a specified region. Expanding the research in either or both of these areas would help to add to the emerging themes of this research. Further research on the mentioned application strategies would potentially help to mold successful approaches to leadership aiding in building relationships among virtual team members.

Summary and Study Conclusions

Leaders of virtual teams desire to have a team that collaborates and have trust among the team members. Virtual teams members do not have the opportunity to meet face-to-face daily with their colleagues like co-located teams members do, therefore it is important that the leader creates opportunities for the member to get to know each other and build relationships. This was

the background for this research, to understand the role that leadership plays in building relationships among virtual team members. This research focused on leaders of virtual teams within the medical device industry.

The research included open-ended interview questions which allowed the research participants to talk openly and share as much information as they felt comfortable with. The use of open ended interview question helped the researcher to gather the perspectives of the participants and gain a robust understanding of the leaders helped to ensure relationships were built among their team members. From these conversations, three themes emerged. The themes were (1) the importance of collaboration, (2) The need of sufficient tools for communication, and (3) The importance of face-to-face interactions to build relationships. The emerging themes of this research, if utilized by leadership, will aid in the development of collaborative, trusting relationships among virtual team members.

References

- Ābeltiņa, A., & Rizhamadze, K. (2021). Challenges to managing virtual teams in Georgian SMEs. In *SHS web of conferences* (Vol. 119, p. 03003). EDP Sciences.
<https://doi.org/10.1051/shsconf/202111903003>
- Abeltina, A., & Rizhamadze, K. (2021). Challenges to managing virtual teams in Georgian SMEs. *SHS Web of Conferences*, 119, 1-9. doi:<https://doi.org/10.1051/shsconf/202111903003>
- Abkhezr, P., McMahon, M., Campbell, M., & Glasheen, K. (2020). Exploring the boundary between narrative research and narrative intervention. *Narrative Inquiry*, 30(2), 316-342. doi:<https://doi.org/10.1075/nl.18031.abk>
- Abrams, L. S. (2010). Sampling 'hard to reach' populations in qualitative research. *Qualitative Social Work*, 9(4), 536-550. doi:<https://doi.org.ezproxy.liberty.edu/10.1177/1473325010367821>
- Afshari, L. (2021). Idealized influence and commitment: A granular approach in understanding leadership. *Personnel Review*, 51(2), 805-855. doi:<https://doi.org/10.1108/PR-03-2020-0153>
- Aga, D. A., Noorderhaven, N., & Vallejo, B. (2016). Transformational leadership and project success: The mediating role of team building. *International Journal of Project Management*, 34, 806-818. doi:<https://doi.org/10.1016/j.ijproman.2016.02.12>
- Agbejule, A., Rapo, J., & Saarikoski, L. (2021). Vertical and horizontal trust and team learning: the role of organizational climate. *International Journal of Managing Projects in Business*, 14(7), 1425-1443. doi:<https://doi.org/10.1108/IJMPB-05-2020-0155>
- Agyemang, F. G., Boateng, H., & Dzandue, M. D. (2017). Examining intellectual stimulation, idealised influence and individualized considerations as an antecedent to knowledge

- sharing: Evidence from Ghana. *Knowledge Management & E-Learning*, 9(4), 84-492.
doi:<https://DOI.10.34105/j.kmel.2017.09.030>
- Alam, M. (2021). A systematic qualitative case study: Questions, data collection, NVivo analysis and saturation. *Qualitative Research in Organizaions and Management: An International Journal*, 16(1), 1-31. doi:<https://doi.org.10.1108/QR0M-09-2019-1825>
- Aliyu , A. A., Bello, M. U., Kasim, R., & Martin, D. (2014). Positivist and non-positivist paradigm in social science research conflicting paradigms or perfect partners? *Journal of Management and Sustainability*, 4(3), 79-95. doi:<https://doi:10.5539/jms.v4n3p79>
- Alsharo, M., Gregg, D., & Ramirez, R. (2017). Virtual team effectiveness: The role of knowledge sharing and trust. *Information & Management*, 479-490.
doi:<https://doi.org/10.1016/j.im.2016.10.005>
- Andersen, J. A. (2018). Servant leadership and transformational leadership: From comparisons to farewells. *Leadership & Organizational Development Journal*, 39(6), 762-774.
doi:<https://doi.10.1108/LODJ-01-2018-0053>
- Anderson, M. H., & Sun, P. Y. (2017). Reviewing leadership styles: Overlaps and the need for a new 'full-range' theory. *International Journal of Management Review*, 19, 76-96.
doi:<https://doi-org.ezproxy.liberty.edu/10.1111/ijmr.12082>
- Anderson, P. H., Dubois, A., & Lind, F. (2018). Process validation: Coping with three dilemmas in process-based single-case research. *Journal of Business & Industrial Marketing*, 33(4), 539-549. doi:<https://doi-org.ezproxy.liberty.edu/10.1108/JBIM-07-2016-0152>
- Angelo, R., & McCarhy, R. (2021). A pedagogy to develop dffective virtual teams. *Journal of Computer Information Systems*, 61(5), 450-457.
doi:<https://doi.org/10.1080/08874417.2020.1717396>

- Anjani, A., & Nizar, A. (2021). Inventory management and cost efficiency: A case study in medical devices distributor. *Research in Business & Social Science, 10*(2), 217-227. doi:<https://doi.org/10.20525/ijrbs.v10i2.1042>
- Antonakis, J., & House, R. J. (2014). Instrumental leadership: Measurement and extension of transformational-transactional leadership theory. *Leadership Quarterly, 25*(4), 746-771. doi:<https://doi.org/10.1016/j.leaqua.2014.04.005>
- Archer, M. A. (2009). Authentic teaming: Undiscussables, leadership and the role of the consultant. *Organization Development Journal, 27*(4), 83-92. Retrieved from <http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fauthentic-teaming-undiscussables-leadership-role%2Fdocview%2F198045725%2Fse-2%3Faccountid%3D12085>
- Archibald, M. M. (2016). Investigator triangulation: A collaborative strategy with potential for mixed methods research. *Journal of Mixed Methods Research, 10*(3), 228-250. doi:<https://doi.org/10.1177/1558689815570092>
- Aronson, J. K., Heneghan, C., & Ferner, R. E. (2020). Medical devices: Definition, classification, and regulatory implications. *An International Journal of Medical Toxicology and Drug Experience, 43*(2), 83-93. doi:<https://doi.org/10.1007/s40264-019-00878-3>
- Ashmi E, J. (2017). Getting things done, Virtually!-The role of virtual team leadership in virtual team effectiveness. *Ushus -Journal of Business Management, 16*(2), 13-30. doi:<https://doi.org/10.12725ujbm.39.2>

- Asiamah, N., Mensah, H. K., & Oteng-Abayie, E. F. (2017). General, target, and accessible population: Demystifying the concepts for effective sampling. *The Qualitative Report*, 22(6), 1607-1622. Retrieved from <http://nsuworks.nova.edu/tqr/vol22/iss6/9>
- Azungah, T. (2018). Qualitative research: Deductive and inductive approaches to data analysis. *Qualitative Research Journal*, 18(4), 383-400. doi:<https://doi.org/10.1108/QRJD-18-00035>
- Badrinarayanan, V., & Arnett, D. B. (2014). Virtual new product development teams: An integrated framework of interface effectiveness. *Revolution in Marketing: Market Driving Changes*, 109-110. doi:https://doi.org/10.1007/978-3-319-11761-4_49
- Baker, H. K., Dewasiri, N. J., Premaratne, S. P., & Koralalage, W. Y. (2020). Corporate governance and dividend policy in Sri Lankan firms: A triangulation approach. *Qualitative Research in Financial Markets*, 12(4), 543-560. doi:<https://doi.org/10.1108/QRFM-11-2019-0134>
- Barrett, J. R. (2007). The researcher as instrument: Learning to conduct qualitative research through analyzing and interpreting a choral rehearsal. *Music Education Research*, 9(3), 417-433. doi:<https://doi-org.ezproxy.liberty.edu/10.1080/14613800701587795>
- Basit, T. (2003). Manual or electronic? The role of coding in qualitative data analysis. *Educational Research*, 45(2), 143-154. doi:<https://doi-org.ezproxy.liberty.edu/10.1080/0013188032000133548>
- Batirlik, S. N., Gencer, Y. G., & Akkucuk, U. (2022). Global virtual team leadership schal (GVTLS) Development in multinational companies. *Sustainability*, 14, 1038-1057. doi:<https://doi.org/10.3390.su14021038>

- Bell, B. S., & Kozlowski, S. W. (2002). A typology of virtual teams implications for effective leadership. *Group & Organization Management, 27*(1), 14-49. doi:<https://doi-org.ezproxy.liberty.edu/10.1177/1059601102027001003>
- Beranek, P. M., & Martz, B. (2005). Making virtual teams more effective: Improving relational links. *Team Performance Management, 11*(5/6), 200-213. doi:<https://doi.org.10.1108/13527590510617774>
- Birkinshaw, J., Gudka, M., & D'Amato, V. (2021). The blinkered boss: How has managerial behavior changed with the shift to virtual working? *California Management Review, 63*(4), 5-26. doi:<https://doi.org.10.1177/00081256211025823>
- Birks, M., Chapman, Y., & Francis, K. (2008). Memoing in qualitative research. *Journal of Research in Nursing, 13*(1), 68-75. doi:<https://doi.10.1177/1744987107081254>
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research, 26*(13), 1802-1811. doi:<https://doi-org.ezproxy.liberty.edu/10.1177/1049732316654870>
- Bisman, J. (2010). Postpositivism and accounting research: A (personal) primer on critical realism. *Australasian Accounting, Business and Finance Journal, 4*(4), 3-25. Retrieved from <https://ro.uow.edu.au/aabfj>
- Bispo, M. D., & Gherardi, S. (2019). Flesh-and-blood knowing: Interpreting qualitative data through embodied practice-based research. *RAUSP Management Journal, 54*(4), 371-383. doi:<https://doi.10.1108/RAUSP-04-2019-0066>
- Blaikie, N. (2018). Confounding issues related to determining sample size in qualitative research. *International Journal of Social Research Methodology, 21*(5), 645-641. doi:<https://doi-org.ezproxy.liberty.edu/10/1080/13645579.2018.1454644>

- Blanchard, K., Hodges, P., & Hendry, P. (2016). *Lead like Jesus*. Nashville, Tennessee, USA: W. Publishing.
- Boddy, C. R. (2016). Sample size for qualitative research. *Qualitative Market Research: An International Journal*, 19(4), 426-432.
doi:<http://dx.doi.org.ezproxy.liberty.edu/10/1108/QMR-06-2016-0053>
- Bogna, F., Raineri, A., & Dell, G. (2020). Critical realism and constructivism: Merging research paradigms for a deeper qualitative study. *Qualitative Research in Organizations and Management: An International Journal*, 15(4), 461-484. doi:<https://doi.10.1108/QROM-06-2019-1778>
- Boies, K., Fiset, J., & Gill, H. (2015). Communication and trust are key: Unlocking the relationship between leadership and team performance and creativity. *The Leadership Quarterly*, 26, 1080-1094. doi:<https://doi.org/10.1016/j.leaqua.2015.07.007>
- Breuer, C., Hertel, G., & Huffmeier, J. (2016). Does trust matter more in virtual teams? A meta-analysis of trust and team effectiveness considering virtuality and documentation as moderators. *Journal of Applied Psychology*, 1151-1177. Retrieved from <http://dx.doi.org/10.1037/apl0000113>
- Breuer, C., Huffmeier, J., Hibben, F., & Hertel, G. (2020). Trust in teams: A taxonomy of perceived trustworthiness factors and risk-taking behaviors in face-to-face and virtual teams. *Human Relations*, 73(1), 3-24. doi:<https://doi-org.ezproxy.liberty.edu/10.1177/0018726718818721>
- Brown, P. (2003). Qualitative methods in environmental health research. *Ethics and Environmental Health*, 111(14), 1789-1798.

- Bush, T. (2018). Transformational leadership: Exploring common conceptions. *Educational Management Administration & Leadership*, 46(6), 883-887.
doi:<https://doi/10.1177/1741143218795731>
- Butina, M., Campbell, S., & Miller, W. (2015). Conducting qualitative research introduction. *Clinical Laboratory Science*, 28(3), 186-189. Retrieved from
<http://ezproxy.liberty.edu/login?url=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fconducting-qualitative-research-introduction%2Fdocview%2F2012018153%2Fse-2%3Faccountid%3D12085>
- Butler, T., Finnegan, P., & Kiely, G. (2021). Global virtual teams coordination mechanisms: Building theory from research in software development. *Behaviour & Information Technology*, 40(1), 1-21. doi:<https://doi-org.ezproxy.liberty.edu/10.1080/0144929x.2021.1909141>
- Cagiltay, K., Bichelmeyer, B., & Akilli, G. K. (2015). Working with multicultural virtual teams: Critical factors for facilitation, satisfaction and success. *Smart Learning Environments*, 2(11), 1-17. doi:<https://doi.10.1186/s40561-015-0018-7>
- Carlson, J. R., Carlson, D. S., Hunter, E. M., Vaughn, R. L., & George, J. F. (2017). Virtual team effectiveness: Investigating the moderating role of experience with computer-mediated communication on the impact of team cohesion and openness. *Journal of Organizational and End User Computing*, 25(2), 1-18. doi:<https://doi.10.4018/978-1-5225-1918-8.ch036>
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulations in qualitative research. *Oncology Nursing Forum*, 41(5), 545-547.
doi:<http://doi/10.1188/14.ONE.545-547>

- Castellano, S., Chandavimol, K., Khelladi, I., & Orhan, M. A. (2021). Impact of self-leadership and shared leadership on the performance of virtual R&D teams. *Journal of Business Research, 128*, 578-586. doi:<https://doi.org/10.1016/j.jbusres.2020.12.030>
- Ceri-Booms, M., Curseu, P. L., & Oerlemans, L. A. (2017). Task and person-focused leadership behaviors and team performance: A meta-analysis. *Human Management Review, 27*(1), 178-192. doi:<https://doi.org/10/1016/j.hrmr.2016.09-010>
- Chai, H. H., Gao, S. S., Chen, K. J., Duangthip, D., Lo, E. C., & Chu, C. H. (2021). A concise review on qualitative research in dentistry. *International Journal of Environmental Research and Public Health, 18*(942), 1-13. doi:<https://doi.org/10.3390/ijerph18030942>
- Chandra, Y., & Shang, L. (2017). A RQDA-based constructivist methodology for qualitative research. *Qualitative Market Research: An International Journal, 20*(1), 90-112. doi:<https://doi.101108/QMR-02-2016-0014>
- Chang, S.-I., Chang, L.-M., & Liao, J.-C. (2020). Risk factors of enterprise internal control under the internet of things governance: A qualitative research approach. *Information and Management, 57*(6), 1-18. doi:<https://doi.org/10.1016/j.im.2020.103335>
- Chatterji, A. K., Cunningham, C. M., & Joseph, J. E. (2019). The limits of relational governance: Sales force strategies in the U.S. medical device industry. *Strategic Management Journal, 40*(1), 55-78. doi:<https://doi.org/10.1002/smj.2964>
- Chen, M.-J., & Miller, D. (2011). The relational perspective as a Business Mindset: Managerial implications for east and west. *Academy of Management Perspectives, 25*(3), 6-18. Retrieved from <https://www.jstor.org/stable/23045047>

- Cheng, X., Bao, Y., Yu, X., & Shen, Y. (2021). Trust and group efficiency in multinational virtual team collaboration: A longitudinal study. *Group Decision and Negotiation*, 39, 529-551. doi:<https://doi.org/10.1007/s10726-020-09722-x>
- Cheron, C., Salvagni, J., & Renato, K. (2022). The qualitative approach interview in administration: A guide for researchers. *Contemporary Management Magazine*, 26(4), 1-15. doi:<https://doi.10.1590/1982-7849rac2022210011.en>
- Cho, J., & Dansereau, F. (2010). Are transformational leaders fair? A multi-level study of transformational leadership, justice perceptions, and organizational citizenship behaviors. *The Leadership Quarterly*, 21, 409-421. doi:<https://doi.10.1016/j.Jeaque.2010.03.006>
- Cho, Y., Grenier, R., & Williams, P. (2022). Introduction: Innovation in qualitative research in HRD. *European Journal of Training and Development*, 46(7/8), 685-692. doi:<https://doi.10.1108/EJTD-05-2022-0058>
- Christ, T. W. (2013). The worldview matrix as a strategy when designing mixed methods research. *International Journal of Multiple Research Approaches*, 7(1), 110-118. Retrieved from <http://ezproxy.liberty.edu/login?url=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fworldview-matrix-as-strategy-when-designing-mixed%2Fdocview%2F1470897434%2Fse-2%3Faccountid%3D12085>
- Cloutier, C., & Ravasi, D. (2021). Using tables to enhance trustworthiness in qualitative research. *Strategic Organization*, 19(1), 113-133. doi:<https://doi.10.1177/1476127020979329>

- Cohen, S. G., & Gibson, C. B. (2003). The last Word: Conclusions and implications. In *Virtual Teams that work: Creating Consitions for virtual team effectiveness* (pp. 403-421). San Francisco: Jossey-Bass.
- Cole, M. L., Cox, J. D., & Stavros, J. M. (2019). Building collaboration in teams through emotional intelligence: Medial by SOAR (strengths, opportunities, aspirations, and results). *Journal of Management and Organization*, 263-283.
doi:<http://dx.doi.org.ezproxy.liberty.edu/10.1017/jmo.2016.43>
- Corry, M., Porter, S., & McKenna, H. (2019). The redundancy of positivism as a paradigm for nursing research. *Nursing Philosophy*, 12230-12239.
doi:<https://doi.org/10.1111/nup.12230>
- Cote, R. (2017). Vision of effective leadership. *Journal of Leadership, Accountability and Ethics*, 14(4), 52-63. doi:<https://doi:1.33423/jlae.v14i4.1486>
- Cramton, C. D., & Webber, S. S. (2005). Relationships among geographic dispersion, team processes, and effectiveness in software development work teams. *Journal of Business Research*, 58(6), 758-765. doi:<https://doi.org/j.jbusres.2003.10.006>
- Creswell, J. W. (2014). *Research design qualitative, quantitative, and mixed methods approaches*. Thousand Oaks: Sage Publications, Inc.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory Into Practice*, 39(3), 124-130. doi:https://doi.org/10.1207/s15430421tip3903_2
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: choosing among five approaches* (Fourth ed.). Thousand Oaks, California: Sage.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design*. Thousand Oaks, California, USA: Sage Publications.

- Crisp, B. C., & Jarvenpaa, S. L. (2013). Swift trust in global virtual teams: Trusting beliefs and normative actions. *Journal of personnel psychology, 12*(1), 45-56.
doi:<https://doi.org/10.1027/1866-5888/a000075>
- Cropanzano, R., Dasborough, M. T., & Weiss, H. M. (2017). Affective event and the development of leader-member exchange. *The Academy of Management Review, 42*(2), 233-258. doi:<https://doi.org/10.5465/amr.2014.0384>
- Cummings, J., & Dennis, A. R. (2018). Virtual first impressions matter: The effect of enterprise social networking sites on impression formation in virtual teams. *Manangement Information Systems Quarterly, 42*(3), 697-714. doi:[https://doi.org.10.25300/MISQ/2018/13202](https://doi.org/10.25300/MISQ/2018/13202)
- Cunliffe, A. L., & Eriksen, M. (2011). Relational leadership. *Human Relations, 64*(11), 1425-1499. doi:<https://doi.org/10.1177/0018726711418388>
- Curry, K. A. (2014). Team leadership: It's not for the faint of heart. *Journal of Cases in Educational Leadership, 17*(2), 20-40. doi:<https://doi.org/10.1177/1555458914528909>
- Cwiklicki, M., & Pilch, K. (2021). Multiple case study design: The example of place marketing research. *Place Branding and Public Diplomacy, 17*(1), 50-62.
doi:<https://doi.org/10.1057/s41254-020-00159-2>
- Cypress, B. S. (2017). Rigor or reliability and validity in qualitative research: Perspectives, strategies, reconceptualization, and recommendaions. *Dimensions of Critical Care Nursing, 36*(4), 252-263. doi:<http://doi.org/10.1097/01.DCC.0000520273>
- Daim, T. U., Ha, A., Reutiman, S., Hughes, B., Pathak, U., Bynum, W., & Bhatla, A. (2012). Exploring the communication breakdown in global virtual teams. *International Journal of Project Management, 30*, 199-212. doi:<https://doi.org/10.1016/j.ijproman.2011.06.004>

- Darban, M. (2021). Learning in virtual student teams: An examination of shared leadership. *Journal of Research on Technology in Education*, 54(5), 1-18.
doi:<https://doi.org/10.1080/15391523.2021.1916800>
- Darics, E., & Gatti, M. C. (2019). Talking a team into being in online workplace collaborations: The discourse of virtual work. *Discourse Studies*, 21(3), 237-257.
doi:<https://doi.org/10.1177/1461445619829240>
- Davis, D. D., & Bryant, J. L. (2003). Influence at a distance: Leadership in global virtual teams. *Advances in Global Leadership*, 3, 303-340. doi:[https://doi.org/10.1016/s1535-1203\(02\)03015-0](https://doi.org/10.1016/s1535-1203(02)03015-0)
- Decrop, A. (1999). Triangulation in qualitative tourism research. *Tourism Management*, 20(1), 157-161. doi:[https://doi.org/10.1016/S0261-5177\(98\)00102-2](https://doi.org/10.1016/S0261-5177(98)00102-2)
- Denis, J.-L., Langley, A., & Sergi, V. (2012). Leadership in the plural. *Academy of Management Annals*, 6(1), 211-283. doi:<https://doi.org/10.5465/19416520.2012.667612>
- Denny, E., & Weckesser, A. (2019). Qualitative research: What it is and what it is not. *BJOG: An International Journal of Obstetrics and Gynecology*, 126(3), 369-368.
doi:<https://doi.org/10.1111/1471-0528.15198>
- Diaz-Saenz, H. R. (2011). Transformational leadership. *The SAGE Handbook of Leadership*, pp. 299-310.
- D'Innocenzo, L., Mathieu, J. E., & Kukenberger, M. R. (2016). A Meta-analysis of different forms of shared leadership-Team performance relations. *Journal of Management*, 42(7), 1964-1991. doi:<http://doi.10.1177/0149206314525205>

- Dionne, S. D., Yammarino, F. J., Atwater, L. E., & Spangler, W. D. (2004). Transformational leadership and team performance. *Journal of Organizational Change Management*, *17*(2), 177-193. doi:<http://doi.10.1108/09534810410530601>
- Dominick, P. G., Iordanoglou, D., Prastacos, G., & Reilly, R. R. (2021). Espoused values of the Fortune 100 best companies to work for: Essential themes and implementation practices. *Journal of Business Ethics*, *173*(1), 69-88. doi:<https://doi.org/10.1007/s10551-020-04564-8>
- Dorfler, V., & Stierand, M. (2021). Bracketing: A phenomenological theory applied through transpersonal reflexivity. *Journal of Organizational Change Management*, *34*(4), 778-793. doi:<https://doi.10.1108/JOCM-12-2019-0393>
- Draper, A., & Swift, J. A. (2010). Qualitative research in nutrition and dietetics: Data collection issues. *Human Nutrition Diet*, *24*, 3-12. doi:<https://doi.org/10.1111/j.1365-277x.2010.01117.x>
- Dresch, A., Lacerda, D. P., & Miguel, P. C. (2015, June). A distinctive analysis of case study, action research and design science research. *Review of Business Management*, *17*(56), 1116-1133. doi:<http://dx.doi.org.ezproxy.liberty.edu/10.7819/rbgn.v17i56.2069>
- Drouin, N., Bourgault, M., & Gervais, C. (2010). Effects of organizational support on components of virtual project teams. *International Journal of Managing Projects in Business*, *3*(4), 625-641. doi:<https://doi-org.ezproxy.liberty.edu/10.1108/17538371011076082>
- Dube, S., & Marnewick, C. (2016). A conceptual model to improve performance in virtual teams. *South African Journal of Information Management*, *18*(1), 1-10. doi:<https://doi.org/10.4102/sajim.v18i674>

- Dulebohn , J. H., & Hoch, J. E. (2017). Virtual teams in organizations. *Human Resource Management Review, 27*, 569-574. doi:<http://dx.doi.org/10.1016/j.hrmr.2016.12.004>
- Dzwigol, H. (2020). Methodological and empirical platform of triangulation in strategic management. *Academic of Strategic Management Journal, 19*(4), 1-8. Retrieved from <https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/methodological-empirical-platform-triangulation/docview/2435127174/se-2?accountid=12085>
- Efimov, I., Harth, V., & Mache, S. (2020). Health-oriented self and employee leadership in virtual teams: A qualitative study with virtual leaders. *International Journal of Environmental Research and Public Health, 17*(18), 6519-6538. doi:<https://doi.org/10.3390/ijerph17186519>
- Elche, D., Ruiz-Palomino, P., & Linuesa-Largreo, J. (2020). Servant leadership and organizational citizenship behavior The mediating effect of empathy and service climate. *International Journal of Contemporary Hospitality Management, 32*(6), 2035-2053. doi:<https://doi/10.1108/IJCHM-05-2019-0501>
- El-Tayeh, A., Gil, N., & Freeman, J. (2008). A methodology to evaluate the usability of digital socialization in virtual engineering design. *Research in Engineering Design, 19*, 29-45. doi:<https://doi.org.10.1007/s00163-007-0037-7>
- Elyousfi, F., Anand, A., & Dalmasso, A. (2021). Impact of e-leadership and team dynamics on virtual team performance in a public organization. *International Journal of Public Sector Management, 34*(5), 508-528. doi:<https://doi.10.1108/IJPSM-08-2020-0218>

- Eseryel, U. Y., Crowston, K., & Heckman, R. (2021). Functional and visionary leadership in self-managing virtual teams. *Group & Organizational Management, 46*(2), 434-460.
doi:<https://doi.org/10.1177/1059601120955034>
- Espinosa, A. J., & Carmel, E. (2003). The impact of time separation on coordination in global software. *8*(4), 249-266. doi:<https://doi.org/10.1002/spip.185>
- Espinosa, J. A., Nan, N., & Carmel, E. (2015). Temporal distance, communication patterns, and task performance in teams. *Journal of Management Information Systems, 32*(1), 151-191.
doi:<https://doi.org/10/108007421222.2015.1029390>
- Eubanks, D. L., Palanski, M., Olabisi, J., Joinson, A., & Dove, J. (2016). Team dynamics in virtual, partially distributed teams: Optimal role fulfillment. *Computers in Human Behavior, 61*, 556-568. doi:<http://dx.doi.org/10.1016/j.chb.2106.03.035>
- Evans, K., Sanner, B., & Chiu, Chia-Yen(Chad). (2021). Shared leadership, unshared burdens: How shared leadership structure schema lowers individuals enjoyment without increasing performance. *Group & Organizational Management, 46*(6), 1027-1072.
doi:<https://doi.org/10.1177/1059601121997225>
- Farhikhteh, S., Kazemi, A., Shahin, A., & Shafiee, M. M. (2020). How competitiveness factors propel SMEs to achieve competitive advantage? *Competitiveness Review: An International Business Journal, 30*(3), 315-338. doi:<https://doi.org/10.1108/cr-12-2018-0090>
- Faris, O., & Shuren, J. (2017). An FDA viewpoint on unique considerations for medical-device clinical trials. *The New England Journal of Medicine, 376*(14), 1350-1357.
doi:<https://doi.org/10.1056/NEjMra1512592>

- Farquhar, J., Michels, N., & Robson, J. (2020). Triangulation in industrial qualitative case study research: Widening the scope. *Industrial Marketing Management*, 87, 160-170.
doi:<https://doi.org/10.1016/j.indmarman.2020.02.001>
- Feitosa, J., & Salas, E. (2020). Today's virtual teams: Adapting lessons learned to the pandemic context. *Organizational Dynamics*, 50(1), 1-4.
doi:<https://doi.org/10.1016/j.orgdyn.2020.100777>
- Fernandez, D. B., & Jawadi, N. (2015). Virtual R&D project teams: From e-leadership to performance. *The Journal of Applied Business REsearch*, 31(5), 1693-1708.
doi:<https://doi.org/10.19030/jabr.v31i5.9384>
- Fischer, C. T. (2009). Bracketing in qualitative research: Conceptual and practical matters. *Psychotherapy Research*, 19(4-5), 583-590. doi:<https://doi.org/10.1080/10503300902798375>
- Fitzsimons, G. M., Sackett, E., & Finkel, E. J. (2016). Transactive goal dynamics theory: A relational goals perspective on work teams and leadership. *Research in Organizational Behavior*, 36, 135-155. doi:<https://dx.doi.org/10.1016/j.riob.2016.11.006>
- Flynn, S. V., & Korcuska, J. S. (2018). Credible phenomenological research: A mixed-methods study. *Counselor Education & Supervision*, 57, 34-50. doi:<https://doi.org/10.1002/ceas.12092>
- Ford, R. C., Piccolo, R. F., & Ford, L. R. (2017). Strategies for building effective virtual teams: Trust is key. *Business Horizons*, 60(1), 25-34.
doi:<https://doi.org/10.1016/j.bushor.2016.08.009>
- Fouretier, A., & Bertram, D. (2014). New regulations on medical devices in Europe: What to expect? *Expert Review of Medical Devices*, 11(4), 351-359.
doi:<https://doi.org/10.1586/17434440.2014.916209>

- Furlanetto, C. D., Weymer, A. S., & Matos, R. D. (2023). Conscious capitalism and construction of humanized relationships: A study in a credit cooperative from the sensemaking perspective. *Journal of Contemporary Administration*, 27(2), 1-15.
doi:<https://doi.org/10.1590/1982-7849rac2022210251.en>
- Furst, S. A., Reeves, M., Rosen, B., & Blackburn, R. S. (2004). Managing the life cycle of virtual teams. *The Academy of Management Executive*, 18(2), 6-20. Retrieved from <https://www.jstor.org/stable/4166058>
- Fusch, P., Fusch, G. E., & Ness, L. R. (2018). Denzin's paradigm shift: Revisiting triangulation in qualitative research. *Journal of Social Change*, 10(1), 19-32.
doi:<https://doi.org/10.5590/JOSC.2018.10.1.02>
- Geddis-Regan, A., Exley, C., & Taylor, G. (2021). Navigating the dual role of clinician-researcher in qualitative dental research. *Journal of Dental Research Clinical and Translational Research*. doi:<https://doi.org/10.1177/2380084421998613>
- Gibbs, J., & Boyraz, M. (2015). International HRM's role in managing global teams. *The Routledge Companion to International Human Resource Management*, 44(6), 1037-1039.
doi:<https://doi.org/10.1108/PR-02-2-15-0046>
- Gibson, L. L., Maynard, M. T., Jones Young, N. C., Vartiainen, M., & Hakonen, M. (2015). Virtual teams research: 10 Years, 10 themes, and 10 opportunities. *Journal of Management*, 41(5), 1313 - 1337. doi:<https://doi.org/10.1177/0149206314559946>
- Graca, A. M., & Passos, A. M. (2015). Team leadership across contexts: A qualitative study. *Leadership and Organization Development Journal*, 36(5), 489-511. doi:<https://doi.org/ezproxy.liberty.edu/10.1108/LODJ-08-2013-0114>

- Graham, J. W. (1991). Servant-leadership in organizations: Inspirational and moral. *The Leadership Quarterly*, 2(2), 105-119. Retrieved from [https://doi.org/10.1016/1048-9843\(91\)90025-W](https://doi.org/10.1016/1048-9843(91)90025-W)
- Grant, A. (2014). The Efficacy of Executive Coaching in Times of Organisational Change. *Journal of Change Management*, 14(2), 258-280.
doi:<http://dx.doi.org/10.1080/14697017.2013.805159>
- Grant, A. (2014). Troubling 'lived experience': A post-structural critique of mental health nursing qualitative research assumptions. *Journal of Psychiatric and Mental Health Nursing*, 21(6), 544-549. doi:<https://doi-org.ezproxy.liberty.edu/10.1111/jpm.12113>
- Green, D. D., & Roberts, G. E. (2010). Personnel implications of public sector virtual organizations. *Public Personnel Management*, 39(1), 47-57.
doi:<https://doi.org/10.1177/009102601003900103>
- Green, H. E. (2014). Use of theoretical and conceptual frameworks in qualitative research. *Nurse Researcher*, 21(6), 34-40. doi:<http://dx.doi.org/10.7748/nr.21.6.34.e1252>
- Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness*. New York: Paulist Press.
- Gregory, K. (2019). Lessons of a failed study: Lone research, media analysis, and the limitations of bracketing. *International Journal of Qualitative Methods*, 18, 1-10.
doi:<https://doi.10.1177/160940691982450>
- Greimel, N. S., Kanback, D. K., & Cherlaru, M. (2023). Virtual teams and transformational leadership: An integrative literature review and avenues for further research. *Journal of Innovation & Knowledge*, 8(2), 100351-100362.
doi:<https://doi.10.1016/j.jik.2023.100351>

- Greyson, D. (2018). Information triangulation: A complex and agentic everyday information practice. *Journal of the Association for Information Science Technology*, 69(7), 869-878.
doi:<https://doi.org/10.1177/1042258719899425>
- Gross, R. (2018). Connecting the links between leadership styles and virtual team effectiveness. *Journal of Enterprising Culture*, 26(2), 185-205.
doi:<https://doi.org/10.1142/S0218495818500073>
- Hahm, S. (2017). Information sharing and creativity in a virtual team: Roles of authentic leadership, sharing team climate and psychological empowerment. *KSI Transactions on Internet and Information Systems*, 11(8), 2-16.
doi:<https://doi.org/10.3837/tiis.2017.08.020>
- Hambley, L. A., O'Neill, T. A., & Kline, T. J. (2007). Virtual team leadership: The effects of leadership style and communication medium on team interaction styles and outcomes. *Organizational Behavior and Human Decision Processes*, 103, 1-20.
doi:<https://doi.org/10.1016/j.obhdp.2006.09.004>
- Hambley, L. A., O'Neill, T. A., & Kline, T. J. (2007). Virtual team leadership: Perspectives from the field. *International Journal of e-Collaboration*, 3(1), 40-64.
doi:<http://dx.doi.org.ezproxy.liberty.edu/10.4018/jec.2007010103>
- Hargreaves, C., Clarke, A. P., & Lester, K. R. (2022). Microsoft teams and team performance in the COVID-19 pandemic within an NHS trust community service in North-West England. *Team Performance Management: An International Journal*, 28(1/2), 79-94.
doi:<https://doi.org/10.1108/TPM-11-2021-0082>

- Hart, R. K. (2016). Informal virtual mentoring for team leaders and members: Emergence, content, and impact. *Advances in Developing Human Resources, 18*(3), 352-368.
doi:<https://doi-org.ezproxy.liberty.edu/10.1177/1523422316645886>
- Hart, R. K., & Mcleod, P. L. (2003). Rethinking team building in geographically dispersed teams: One message at a time. *Organizational Dynamics, 31*(4), 352-361.
doi:[https://doi.org/10.1016/@0090-2616\(02\)00131-6](https://doi.org/10.1016/@0090-2616(02)00131-6)
- Hattori, R. A., & Lapidus, T. (2004). Collaboration, trust and innovative change. *Journal of Change Management, 4*(2), 97-104. doi:<https://doi.org/10.1080/14697010320001548187>
- Hays, D. G., & McKibben, W. B. (2021). Promoting rigorous research: Generalizability and Qualitative Research. *Journal of Counseling and Development, 99*(2), 178-188.
doi:<https://doi.org/10.1002/jcad.12365>
- Henderson, L. S., Stackman, R. W., & Lindekilde, R. (2016). The centrality of communication norm alignment, role clarity, and trust in global project teams. *International Journal of Project Management, 34*, 1717-1730.
doi:<https://dx.doi.org/10.1016/j.ijproman.2016.09.012>
- Hennink, M. M., Kaiser, B. N., & Weber, M. B. (2019). What influences saturation? Estimating sample sizes in focus group research. *Qualitative Health Research, 29*(10), 483-496.
doi:<https://doi.org/10.1177/1049732318821692>
- Hewitt, J. (2007). Ethical components of researcher-researched relationships in qualitative interviewing. *Qualitative Health Research, 17*(8), 1149-1159. doi:<https://doi-org.ezproxy.liberty.edu/10.1177/1049732307308305>
- Heyler, S. G., & Martin, J. A. (2018). Servant leadership theory: Opportunities for additional theoretical integration. *Journal of Managerial Issues, 30*(2), 230-243. Retrieved from

http://bi.gale.com.ezproxy.liberty.edu/global/article/GALE%7CA545892003?u=vic_liberty

Hill, N. S., & Bartol, K. M. (2018). Five ways to improve communication in virtual teams.

Massachusetts Institute of Technology Sloan Management Review, 60(1), 1-5. Retrieved from

<https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/five-ways-improve-communication-virtual-teams/docview/2131141033/se-2?accountid=12085>

Hoch, J. E., & Dulebohn, J. H. (2017). Team personality composition, emergent leadership and shared leadership in virtual teams: A theoretical framework. *Human Resource*

Management Review, 27, 678-693. doi:<http://dx.doi.org/10.1016/j.hrmr.2016.12.012>

Hoch, J. E., Bommer, W. H., Dulebohn, J. H., & Wu, D. (2016). Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta analysis. *Journal of Management*, 44(2), 501-529. doi:<https://doi-org.ezproxy.liberty.edu/10.1177/0149206316665461>

Hoch, J., & Kozlowski, S. W. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, 99(3), 390-403.

doi:<http://dx.doi.org.ezproxy.liberty.edu/10.1037/a0030264>

Hojjer, B. (2008). Ontological assumptions and generalizations in qualitative (audience)

research. *European Journal of Communication*, 23(3), 275-294. doi:<https://doi-org.exproxy.liberty.edu/10.1177/0267323108092536>

- Holck, L. (2018). Affective ethnography: Reflections on the application of useful research on workplace diversity. *Qualitative Research in Organizations and Management: An International Journal*, 13(3), 218-234. doi:<https://doi.org/10.1108/QROM-11-2016-1456>
- Holmlund, M., Witell, L., & Gustafsson, A. (2020). Viewpoint: Getting your qualitative service research published. *Journal of Services Marketing*, 34(1), 111-116. doi:<https://doi.org/10.1108/JSM-11-2019-0444>
- Hovde, M. R. (2014). Factors that enable and challenge international engineering communication: A case study of United States/British design team. *IEEE Transactions on Professional Communication*, 57(4), 242-265. doi:<https://doi.org/10.1109/TPC.2014.2363893>
- Hurd, F., Dyer, S., & Fitzpatrick, M. (2019). Good things take time: A living story of research as life. *Qualitative Research in Organizations and Management: An International Journal*, 14(1), 27-42. doi:<https://doi-org.ezproxy.liberty.edu/10.1108/QROM-03-2017-1507>
- Imenda, S. (2014). Is there a conceptual difference between theoretical and conceptual frameworks. *Journal of Social Science*, 38(2), 185-195. doi:<https://doi.org/10.1080/09718923.2014.11893249>
- Iorio, J., & Taylor, J. E. (2015). Precursors to engaged leaders in virtual project teams. *International Journal of Project Management*, 33, 395-405. doi:<https://doi.org/10.1016/j.ijproman.2014.06.007>
- Jabareen, Y. (2009). Building a conceptual framework: Philosophy, definitions, and procedure. *International Journal of Qualitative Methods*, 8(4), 49-62. doi:<https://doi.org/10.1177/160940690900800406>

- Jackson, S. E., & Ruderman, M. N. (1995). Diversity in work teams: Research paradigms for a changing workplace. *American Psychological Association*, 1-13.
doi:<http://dx.doi.org/10/1037/10189-010>
- Jamshed, S., & Majeed, N. (2019). Relationship between team culture and team performance through lens of knowledge sharing and team emotional intelligence. *Journal of Knowledge Management*, 23(1), 90-109. doi:<https://doi.org/10.1108/JKM-04-2018-0265>
- Jian, G. (2021). From empathic leader to empathic leadership practice: An extension to relational leadership theory. *Human Relations*, 75(5), 931-955.
doi:<https://doi.10.1177/0018726721998450>
- Jimenez, A., Boehe, D. M., Taras, V., & Caprar, D. V. (2017). Working across boundaries: Current and future perspectives on global virtual teams. *Journal of International Management*, 23, 341-349. doi:<http://dx.doi.org/10.1016/j.intman.2017.05.001>
- Jong, B. D., Gillespie, N., Williamson, I., & Gill, C. (2021). Trust Consensus within culturally diverse teams: A multistudy investigation. *Journal of Management*, 47(8), 2135-2168.
doi:<https://doi.org/10.1177/0149206320943658>
- Kabadayi, S., & Tsiotsou, R. H. (2022). Guest editorial: The triple-A framework for serving humanity with service research. *Journal of Services Marketing*, 36(7), 865-872.
doi:<https://doi.org/10.1108/JSM-07-2022-0234>
- Kankam, P. K. (2019). The use of paradigms in information research. *Library and Information Science Research*, 41, 85-92. doi:<https://doi.org/10/1016/j.lisr.2019.04.003>
- Kayworth , T. R., & Leidner, D. E. (2002). Leadership effectiveness in global virtual teams. *Journal of Management Information Systems*, 18(3), 7-40. Retrieved from <https://www.jstor.org/stable/40398552>

- Keller, T., & Alsdorf, K. L. (2012). *Every Good Endeavor*. New York: Dutton, a member of Penguin Group (USA) Inc.
- Kerber, K. W., & Buono, A. F. (2004). Leadership challenges in global virtual teams: Lessons from the field. *SAM Advanced Management Journal*, 69(4), 4-10. Retrieved from https://link.gale.com/apps/doc/A126315479/GBIB?u=vic_liberty&sid=summon&xid=1e72eae1
- Khan, M. M., Mubarik, M. S., Ahmed, S. S., Islam, T., & Khan, E. (2022). The contagious servant leadership: exploring the role of servant leadership in leading employees to servant colleagueship. *Leadership & Organization Development Journal*, 43(6), 847-861. doi:<https://doi.org/10.1108/LODJ-06-2021-0305>
- Kiesler, S., Siegel, J., & McGuire, T. W. (1984). Social psychological aspects of computer-mediated communication. *American Psychologist*, 39(10), 1123-1134. doi:<https://doi.org/10.1037/0003-066X.39.10.1123>
- Kim, D., Ryu, G. H., Shin, K., & Lee, K.-S. (2021). What are the success factors for a partnership with global medical device companies? Evidence from Korea. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(237), 2-20. doi:<https://doi.org/10.3390/joitmc7040237>
- Kirkman, B. L., Rosen, B., Tesluk, P. E., & Gibson, C. B. (2004). The impact of team empowerment on virtual team performance: The moderating role of face to face interaction. *The Academy of Management Journal*, 47(2), 175-192. doi:<https://doi.org/10.2307/20159571>
- Kligler, B. (2017). Leading a virtual team. *Integrative Leadership*, 13(4), 277-278. doi:<https://doi.org/10.1016/j.explore.2017.04.016>

- Konecki, K. T. (2018). Classic grounded theory-The latest version: Interpretation of classic grounded theory as a meta-theory of research. *Symbolic Interaction, 41*(4), 547-564.
doi:<https://doi.10.1002/SYMB.361>
- Kozlowski, S. W., Chao, G. T., & Fossen, J. V. (2021). Leading virtual teams. *Organizational Dynamics, 1*, 1-11. doi:<https://doi.org/10/1016/j.orgdyn.2021.100842>
- Kumari, K., Abbas, J., Hwang, J., & Cioca, L. I. (2022). Does servant leadership promote emotional intelligence and organizational citizenship behavior among employees? A structural analysis. *Sustainability, 14*(9), 5231-5249.
doi:<https://doi.org/10.3390/su14095231>
- Kuscu, M., & Arslan, D. (2016). Virtual leadership at distance education teams. *Turkish Online Journal of Distance Education, 17*(3), 136-156. doi:<https://doi.org/10.17718/tojde.79230>
- Laat, P. B. (2005). Trusting virtual trust. *Ethics and Information Technology, 7*, 167-180.
doi:<https://doi.10.1007/s10676-006-0002-6>
- Lauring, J., & Jonasson, C. (2018). Can leadership compensate for deficient inclusiveness in global virtual teams. *Human Resource Management Journal, 28*, 392-409. doi:<https://doi-org.ezproxy.liberty.edu/10.1111/1748-8583.12184>
- Lee, A., Lyubovnikova, J., Tian, A. W., & Knight, C. (2020). Servant leadership: A meta-analytic examination of incremental contribution, moderation and mediation. *Journal of Occupational and Organizational Psychology, 93*(1), 1-44.
doi:<https://doi.10.1111/joop.12265>
- Lefkowich, M. (2019). When women study men: Gendered implications for qualitative research. *International Journal of Qualitative Methods, 18*, 1-9.
doi:<https://doi.org/10.1177/16094069198772388>

- Leung, K., & Wang, J. (2015). Social processes and team creativity in multicultural teams: A socio-technical framework. *Journal of Organizational Behavior, 36*, 1008-1025. doi:<https://doi.org/10.1002/job.2021>
- Levasseur, R. E. (2017). People skills: Building the perfect team - A change management perspective. *Inform Journal on Applied Analytics, 47*(3), 270-272. doi:[https://doi-org.ezproxy.liberty.edu/10.1287.0896](https://doi.org/ezproxy.liberty.edu/10.1287.0896)
- Liao, C. (2017). Leadership in virtual teams: A multilevel perspective. *Human Resource Management Review, 27*(4), 648-659. doi:<https://doi.org/10.1016/j.hrmr.2016.12.010>
- Liden, R. C., Wayne, S. J., Liao, C., & Meuser, J. D. (2014). Servant leadership and serving culture: Influences on individual and unit performance. *Academy of Management Journal, 57*(5). doi:<https://doi.org/10.5465/amj.2013.0034>
- Lin, C., Tsai, H.-L., & Wu, J.-C. (2014). Collaboration strategy decision-making using the Miles and Sno typology. *Journal of Business Research, 67*, 1979-1990.
- Lin, C.-N., & Roan, J. (2022). Identifying the development stages of virtual teams-An application of social network analysis. *Information Technology & People, 35*(7), 2368-2392. doi:<https://doi.org/10.1108/ITP-04-2020-0251>
- Lindgren, B.-M., Lundman, B., & Graneheim, U. H. (2020). Abstraction and interpretation during the qualitative content analysis process. *International Journal of Nursing Studies, 108*, 1-6. doi:<https://doi.org/10.1016/j.ijnurstu.2020.103632>
- Linneberg, M. S., & Korsgaard, S. (2019). Coding qualitative data: A synthesis guiding the novice. *Qualitative Research Journal, 19*(3), 259-270. doi:<https://doi.org/10.1108/QRJ-12-2018-0012>

- Lock, I., & Seele, P. (2018). Gauging the rigor of qualitative case studies in comparative lobbying research. A framework and guideline for research and analysis. *Journal of Public Affairs, 18*(4), 1832-1836. doi:<https://doi-org.ezproxy.liberty.edu/10.1002/pa.1832>
- Locke, K., Feldman, M., & Golden-Biddle, K. (2022). Coding practices and iterativity: Beyond templates for analyzing qualitative data. *Organizational Research Methods, 25*(2), 262-284. doi:<https://Doi.10.1177/1094428120948600>
- Loon, M., Lim, Y. M., Lee, T. H., & Tam, C. L. (2012). Transformational leadership and job-related learning. *Management Research Review, 35*(3/4), 192-205. doi:<https://DOI.10.1108/01409171211210118>
- Low, J. (2019). A pragmatic definition of the concept of theoretical saturation. *Sociological Focus, 52*(2), 131-139. doi:<https://doi.org.ezproxy.liberty.edu//10.1080/00380237.2018.1544514>
- Lowik, S., Kraaijenbrink, J., & Groen, A. (2016). The team absorptive capacity triad: A configurational study of individual, enabling, and motivating factors. *Journal of Knowledge Management, 20*(5), 1083-1103. doi:<https://doi.org/10/1108/JKM-11-2015-0433>
- Lu, J., Zhang, Z., & Jia, M. (2019). Does servant leadership affect employees' emotional labor? A social information-processing perspective. *Journal of Business Ethics, 159*, 507-518. doi:<https://doi.org/10.1007/s10551-018-3816-3>
- Luu, T. T., Rowley, C., Dinh, C. D., Qian, D., & Le, H. Q. (2019). Team creativity in public healthcare organizations: The roles of charismatic leadership, team job crafting, and collective public service motivation. *Public Performance and Management Review,*

42(6), 1448-1480. doi:<https://doi-org.ezproxy.liberty.edu/10.1080/15309576.2019.1595067>

Maduka, N. S., Edwards, H., Greenwood, D., Osborne, A., & Babatunde, S. O. (2018). Analysis of competencies for effective virtual team leadership building successful organizations. *Benchmarking: An International Journal*, 25(2), 696-712. doi:<http://dx.doi.org.ezproxy.liberty.edu/10.1108/BIJ-08-2016-0124>

Maes, J. D., & Weldy, T. G. (Fall 2018). Building effective virtual teams: Expanding OD research and practice. *Organization and Development Journal*, 36(3), 83-90. Retrieved from <https://www.proquest.com/scholarly-journals/building-effective-virtual-teams-expanding-od/docview/2099386470/se-2>

Maher, C., Hadfield, M., Hutchings, M., & de Eyto, A. (2018). Ensuring rigor in qualitative data analysis: A design research approach to coding NVivo with traditional material methods. *International Journal of Qualitative Methods*, 17, 1-13. doi:<https://doi.10.1177/1609406918776362>

Maresova, P., Hajek, L., Krejcar, O., Storek, M., & Kuca, K. (2020). New regulations on medical devices in Europe: Are they an opportunity for growth? *Journal of Administrative Sciences*, 10(16), 351-359. doi:<https://doi.org.10.3390/admsci10010016>

Marlow, S. L., Lacerenza, C. N., & Salas, E. (2017). Communication in virtual teams: A conceptual framework and research agenda. *Human Resource Management Review*, 27, 575-589. doi:<https://dx.doi.org/10.1016/j.hmr.2016.12.005>

Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *The Journal of*

Computer Informaion Systems, 54(1), 11-22.

doi:<https://doi.org/10.1080/08874417.2013.11645667>

Maxwell, B. (2019). Insitutional review boards in qualitative research: Has it gone overboard?

Canadian Journal of Action Research, 20(1), 52-70. Retrieved from

<https://journals.nipissingu.ca/index.php/cjar/article/view/446>

Mayer, C., Sivatheerthan, T., Mutze-Niewohner, S., & Nitsch, V. (2023). Sharing leadership

behaviors in virtual teams: Effects of shared leadership behaviors on team member

satisfaction and productivity. *Team Performance Management: An International Journal*,

29(1/2), 90-112. doi:<https://DOI/10.1108/TPM-07-2022-0054>

Maynard, M. T., Mathieu, J. E., Gilson, L. L., Sanchez, D. R., & Dean, M. D. (2019). Do I really

know you and does it matter? Unpacking the relationship between familiarity and

information elaboration in global virtual teams. *Group & Organization Management*,

44(1), 3-37. doi:<https://doi.org/10.1177/1059601118785842>

McCauley, C. D., & Palus, C. J. (2021). Developing the theory and practice of leadership

development: A relational view. *The Leadership Quarterly*, 32(5), 101456-101461.

doi:<https://doi.org/10.1016/j.leaqua.2020.101456>

Mehta, K., & Shah, V. (2019). Global Business: Virtual workplaces and collaborations.

International Journal of Business, Humanities and Technology, 9(4), 1-9.

doi:<https://doi.org/10.30845/ijbht.v9n4p1>

Mell, J. N., Jang, S., & Chai, S. (2021). Bridging temporal divides: Temporal brokerage in global

team and its impact on individual performance. *Organization Science*, 32(3), 731-751.

doi:<https://doi.org/10.1287/orsc.220.1406>

- Mertens, D. M. (2015). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (4th ed. ed.). Thousand Oaks, CA, USA: Sage Publications, Inc.
- Mishra, S., & Dey, A. K. (2022). Understanding and identifying themes in qualitative case study research. *South Asian Journal of Business and Management Cases*, 11(3), 187-192.
doi:<https://doi.org/10.1177/22779779221134659>
- Mittal, S., & Dhar, R. L. (2015). Transformational leadership and employee creativity: Mediating role of creative self-efficacy and moderating role of knowledge sharing. *Management Decision*, 53(5), 894-910. doi:<https://doi.org/10.1108/MD-07-2014-0464>
- Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*, 7(1), 23-48.
doi:<http://dx.doi.org.ezproxy.liberty.edu/10.26458/jedep.v7i1.571>
- Moon, M. D.-C., & Wolf, L. A. (2019). Triangulation: A method to increase validity, reliability, and legitimation in clinical research. *Journal of Emergency Nursing*, 45(1), 103-105.
doi:<https://doi.org/10.1016/j.jen.2018.11.004>
- Morgado, F. F., Meireles, J. F., Neves, C. M., Amaral, A. C., & Ferreira, M. E. (2017). Scale development: Ten main limitations and recommendations to improve future research practices. *Psychology: Reflection and Criticism*, 30(3), 3-20.
doi:<https://doi.org/10.1186/s41155-016-0057-1>
- Morgan, L., Paucar-Caceres, A., & Wright, G. (2014). Leading effective global virtual teams: The consequences of methods of communication. *Systemic Practics and Action Research*, 27(6), 607-624. doi:<https://doi-org.ezpoxy.liberty.edu/10.1007/s11213-014-9315-2>

- Morgeson, F. P. (2005). The external leadership of self-managing teams: Intervening in the context of novel and disruptive events. *Journal of Applied Psychology, 90*(3), 497-508.
doi:<https://doi.org/10.1037/0021-9010.90.3.497>
- Muethel, M., & Hoegl, M. (2010). Cultural and societal influences on shared leadership and globally dispersed teams. *Journal of International Management, 16*, 234-246.
doi:<https://doi.org/10.1016/j.intman.2010.06.003>
- Mukherjee, D., & Natrajan, N. S. (2017). Comparative analysis of social media tool used in software project deploying virtual teams. *Vision, 21*(4), 397-409.
doi:<https://doi.org/10.1177/0972262917733180>
- Mutha, P., & Srivastava, M. (2023). Decoding leadership to leverage employee engagement in virtual teams. *International Journal of Organizational Analysis, 31*(3), 737-758.
doi:<https://doi.org/10.1108/IJOA-07-2021-2856>
- Mysirlaki, S., & Paraskeva, F. (2020). Emotional intelligence and transformational leadership in virtual teams: Lessons from MMOGs. *Leadership and Organization Development Journal, 41*(4), 551-566. doi:<https://doi.org/10.1108/LODJ-01-2019-0035>
- Newman, S. A., & Ford, R. C. (2021). Five steps to lead in your team in the virtual COVID-19 workplace. *Organizational Dynamics, 50*, 1-11.
doi:<https://doi.org/10.1016/j.orgdyn.2021.100802>
- Newman, S. A., Ford, R. C., & Marshall, G. W. (2020). Strategies for aligning performance expectations for virtual teams. *S.A.M. Advanced Management Journal, 85*(3), 23-36.
Retrieved from
http://bi.gale.com.ezproxy.liberty.edu/global/article/GALE%7CA660988514?=&vic_liberty

Newman, S. A., Ford, R. C., & Marshall, G. W. (2020). Virtual team leader communication:

Employee perception and organizational reality. *International Journal of Business*

Communications, 57(4), 452-473. doi:<https://doi.org/10.1177/2329488419829895>

Nicholson, J., & Kurucz, E. (2019). Relational leadership for sustainability: Building an ethical

framework from the moral theory of ethics of care. *Journal of Business Ethics*, 156, 25-

43. doi:<https://doi.org/10.1007/s10551-017-3593-4>

Nielsen, B. B., Welch, C., Chidlow, A., Miller, S. R., Aguzzoli, R., Gardner, E., . . . Pegoraro, D.

(2020). Fifty years of methodological trends in JIBS: Why future IB research needs more triangulation. *Journal on International Business Studies*, 51, 1478-1499.

doi:<https://doi.org/10.1057/s41267-020-00372-4>

Nordback, E. S., & Espinosa, A. J. (2019). Effective coordination of shared leadership in global

virtual teams. *Journal of Management Information Systems*, 36(1), 321-350.

doi:<https://doi.org/10.1080/07421222.2018.1558943>

Northouse, P. G. (2016). *Leadership theory and practice*. Thousand Oaks, California: SAGE

Publications, Inc.

Olekanma, O., Dorfler, V., & Shafti, F. (2022). Stepping into the participants' shoes: The trans-

positional cognition approach. *International Journal of Qualitative Methods*, 21, 1-15.

doi:<https://doi.org/10.1177/16094069211072413>

Orae, M., Hosseini, M. R., Edwards, D. J., Li, H., Papadonikolaki, E., & Cao, D. (2019).

Collaboration barriers in BIM-based construction networks: A conceptual model.

International Journal of Project Management, 27, 839-854.

doi:<https://doi.org/10.1016/j.ijproman.2019.05.004>

- Otero-Neira, C., Varela-Niera, C., & Bande, B. (2016). Supervisory servant leadership and employee's work role performance. *Leadership & Organiation Development Journal*, 37(7), 860-881. doi:<https://doi.org/10.1108/LODJ-11-2014-0230>
- Pangil, F., & Chan, J. M. (2014). The mediating effect of knowledge sharing on the relationship between trust and virutal effectiveness. *Journal of Knowledge Management*, 18(1), 92-106. doi:<https://doi.org/10.1108/JKM-09-2013-0341>
- Paschen, J.-A., & Ison, R. (2014). Narrative research in climat chnge adaptation-Exploring a complementary paradigm for reesearch and governance. *Research Poliy*, 43(6), 1083-1092. doi:<https://doi.org/10.1016/j.respol.2013.12.006>
- Patterson, B. J., Dzurec, L., Sherwood, G., & Forrester, D. A. (2020). Developing authentic leadership voice: Novice faculty experience. *Nursing Education Perspectives*, 41(1), 10-15. doi:<https://doi.org/10.1007/01.NEP.0000000000000494>
- Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative Social Work: Qualitative Social Work Research and Practice*, 1(3), 261-283. doi:<https://doi.org/10.1177/1473325002001003636>
- Pauleen, D. J. (2004). A inductively derived model of leader-initiated relationship building with virtual team members. *Journal of Management Information Systems*, 20(3), 227-256. doi:<https://doi.org/10.1080/07421222.2003.11045771>
- Pauleen, D. J., & Yoong, P. (2001). Facilitating virtual team relationships via internet and conventional communication channels. *Internet Research*, 11(3), 190-202. doi:<https://doi-org.ezproxy.liberty.edu/10.1108/10662240110396450>
- Peng, A. C., Lin, H.-E., Schaubroeck, J., McDonough, E. F., Hu, B., & Zhang, A. (2016). CEO intellectual stimulation and employee work meaningfulness: The moderating role of

- organizational context. *Group & Organization Management*, 4(2), 203-231.
doi:<https://doi.org/10.1177/1059601115592982>
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *The Academy of Management Journal*, 49(2), 327-340. Retrieved from <https://www.jstor.org/stable/20159766>
- Plust, U., Murphy, D., & Joseph, S. (2021). A systematic review and metasythesis of qualitative research into teachers' authenticity. *Cambridge Journal of Education*, 51(3), 301-325.
doi:<https://doi.org/10.1080/0305764X.2020.1829546>
- Polit, D. F., & Beck, C. T. (2012). *Nursing research: Generating and assessing evidence for nursing practice*. Philadelphia, PA: Wolters Kluwer.
- Ponto, J. (2015). Understanding and evaluating survey research. *Journal for Advanced Practice in Oncology*, 6(2), 168-171. doi:<https://doi.org/10.6004/jadpro.2015.6.2.9>
- Prabhu, N., & Modem, R. (2023). Shared transformational leadership and emergent team processes: determinants of team viability and team satisfaction. *Journal of Asia Business Studies*, 17(2), 225-255. doi:<https://doi.org/10.1108/JABS-04-2021-0141>
- Presbitero, A. (2020). Foreign language skill, anxiety, cultural intelligence and individual task performance in global virtual teams: A cognitive perspective. *Journal of International Management*, 26(2), 100729-100742. doi:<https://doi.org/10.1016/j.intman.2019.100729>
- Pruzan, P. (2008). Spiritual-based leadership in Business. *Journal of Human Values*, 14(2), 101-114. doi:<https://doi.org/10.1177/097168580801400202>
- Purvanova, R. K. (2013). The role of feeling known for team member outcomes in project teams. *Small Group Research*, 44(3), 298-331. doi:<https://doi.org/10.1177/1046496413480244>

- Purvanova, R. K., & Bono, J. E. (2009). Transformational leadership in context: Face-to-face and virtual teams. *The Leadership Quarterly, 20*, 343-357.
doi:<https://doi.10.1016/j.leaqua.2009.03.004>
- Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *The Leadership Quarterly, 15*, 329-354.
doi:<https://doi.10.1016/j.leaqua.2004.02.009>
- Rafferty, A. E., & Griffin, M. A. (2006). Refining individualized consideration: Distinguishing developmental leadership and supportive leadership. *Journal of Occupational and Organizational Psychology, 79*(1), 37-61. Retrieved from
http://bi.gale.com/ezproxy.liberty.edu/global/article/GALE%7CA144869284?u=vic_liberty
- Reslan, F. B., Garanti, Z., & Emeagwali, O. L. (2021). The effect of servant leadership on innovative work behavior and employee knowledge sharing in the Latvian ICT sector. *Baltic Journal of Management, 16*(5), 729-744. doi:<https://doi.org/10.1108/BJM-09-2020-0321>
- Rhoades, A. (2011). *Built on values: Creating an Enviably culture that outperforms the competition*. Hoboken, NJ: Wiley Publishing.
- Rogers, B. L., Madden, L. T., Grubb, L. K., & Karriker, J. H. (2021). Shouting across the digital divide: The importance of social interactions in virtual teams. *Team Performance Management: An International Journal, 27*(1/2), 1-14. doi:<https://doi.org/10.1108/TPM-05-2020-0042>
- Rose, J., & Johnson, C. W. (2020). Contextualizing reliability and validity in qualitative research: toward more rigorous and trustworthy qualitative social science in leisure

- research. *Journal of Leisure Research*, 51(4), 432-451.
doi:<https://doi.org/10.1080/00222216.2020.1722042>
- Roulet, T. J., Gill, M. J., Stenger, S., & Gill, D. J. (2017). Reconsidering the value of covert research: The role of ambiguous consent in participant observation. *Organizational Research Methods*, 20(3), 487-517. doi:<https://doi.org/10.1177/094428117698745>
- Ruppert-Winkel, C. (2018). Leaders, networks and social context: A relational leadership approach to regional renewable energy self-sufficiency. *Journal of Cleaner Production*, 193, 811-832. doi:<https://doi.org/10.1016/j.jclepro.2018.05.001>
- Rutberg, S., & Bouikidis, C. D. (2018). Focusing on the fundamentals: A simplistic differentiation between qualitative and quantitative research. *Nephrology Nursing Journal*, 45(2), 209-212. Retrieved from <http://ezproxy.liberty.edu/login?url=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Ffocusing-on-fundamentals-simplistic%2Fdocview%2F2028125771%2Fse-2%3Faccountid%3D12085>
- Ruygrok, C. M. (2016). Building a strong team culture for sustained performance. *AAACN Viewpoint*, 38(1), 14-15. Retrieved from <http://ezproxy.liberty.edu/login?url=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fbuilding-strong-team-culture-sustained%2Fdocview%2F1768623011%2Fse-2%3Faccountid%3D12085>
- Ryan, F., Coughlan, M., & Cronin, P. (2007). Step-by-step guide to critiquing research. Part 2: Qualitative research. *British Journal of Nursing*, 16(12), 738-744.
doi:<https://doi.org/10.12968/bjon.2007.16.12.23726>

- Saarijarvi, M., & Bratt, E.-L. (2021). When face-to-face interviews are not possible: Tips and tricks for video, telephone, online chat, and email interviews in qualitative research. *European Journal of Cardiovascular Nursing*, 20, 392-396.
doi:<https://doi.10.1093/eurjcn/zvab038>
- Sanjari, M., Bahramnezhad, F., Fomani, F. K., Shoghi, M., & Cheraghi, M. A. (2014). Ethical challenges of researchers in qualitative studies: The necessity to develop a specific guideline. *Journal of Medical Ethics*, 7(14), 6-11. Retrieved from <https://www.proquest.com/scholarly-journals/ethical-challenges-researchers-qualitative/docview/2595669091/se-2>
- Sarker, S., Ahuja, M., Sarker, S., & Kirkeby, S. (2011). The role of communication and trust in global virtual teams: A social network perspective. *Journal of Management Information Systems*, 28(1), 273-309. doi:<https://doi.10.2753/MIS0742-1222280109>
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., . . . Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality and Quantity*, 52(4), 1893-1907. doi:<https://doi.org.10.1007/s11135-017-0574-8>
- Sebele-Mpofu, F. Y. (2020). Saturation controversy in qualitative research: Complexities and underlying assumptions. *Cogent Social Sciences*, 6(1), 1-17.
doi:<https://doi.org/10.1080/23311886.2020.1838706>
- Sedrine, S. B., Bouderbala, A., & Nasraoui, H. (2021). Leadership style effect on virtual team efficiency: Trust, operational cohesion and media richness roles. *Journal of Management Development*, 40(5), 365-388. doi:<https://doi.10.1108/JMD-10-2018-0289>

- Shachaff, P. (2008). Cultural diversity and information and communication technology impacts on global virtual teams: An exploratory study. *Information and Management*, 45, 131-142. doi:<https://doi.org/10.1016/j.im.2007.12.003>
- Shah, H., Jain, S., & Jain, V. (2022). Can organization team culture benchmark effective teams-performance management concerns, insights and HR implications. *Benchmarking: An International Journal*, 29(5). doi:<https://doi.org/10.1108/BIJ-11-2020-0581>
- Shin, H. W., Picken, J. C., & Dess, G. G. (2017). Revisiting the learning organization: How to create ti. *Organizational Dynamics*, 46, 46-56.
- Shin, S. J., & Zhou, J. (2007). When is educational specialization heterogeneity related to creativity in research and development teams? Transformational leadership as a moderator. *Journal of Applied Psychology*, 92(6), 1709-1721.
doi:<https://doi.org/10.1037/0021-9010.92.6.1709>
- Siangchokyoo, N., Klinger, R. L., & Campion, E. D. (2020). Follower transformation as the linchpin of transformational leadership theory: A systematic review and future research agenda. *The Leadership Quarterly*, 31(1), 101341-101359.
doi:<https://doi.org/10.1016/j.leaqua.2019.101341>
- Simon, M. K., & Goes, J. (2010). *Dissertation & Scholarly Research: Recipes for Success* (2 ed.). Createspace Independent Pub.
- Singh, S. K., Del Giudice, M., Tarba, S. Y., & De Bernardi, P. (2019). Top management team shared leadership, market-oriented culture, innovation capability, and firm performance. *IEEE Transactions on Engineering Management*, 69(6), 1-11.
doi:<https://doi.org/10.1109/TEM.2019:2946608>

- Smit, B. (2018). Expanding educational leadership theories through qualitative relationship methodoligies. *Magis Bogota, Colombia, 11(22)*, 75-86.
doi:<https://10.11144/Javerianam11-22.eelt>
- Sorsa, M. A., Kikkala, I., & Astedt-Kurki, P. (2015). Bracketing as a skill in conducting unstructured qualitative interviews. *Nurse Researcher, 22(4)*, 8-12.
doi:<https://doi.10.7748/nr.22.4.8.e1317>
- Srivastava, S. C., & Chandra, S. (2018). Social presence in virtual world collaboration: An uncertainty reduction perspective using a mixed methods approach. *Management Information Systems Quarterly, 42(3)*, 779-803.
doi:<https://doi.org/10.25300/MISQ/2018//11914>
- Stahl, G. L., & Maznevski, M. L. (2021). Unraveling the effects of cultural diversity in teams: A retrospective of research on multicultural work groups and an agenda for future research. *Journal of International Business Studies, 52*, 4-22. doi:<https://doi.org/10.1057/s41267-020-00389-9>
- Stahl, G., Tung, R. L., Kostova, T., & Zellmer-Bruhn, M. (2016, Aug). Widening he lens: Rethinking distance diversity, and foreignness in international business research through positive organizaitonal scholarchip. *Journal of International Business Studies, 47(6)*, 621-30. doi:<https://doi.1057/jibs.2016.28>
- Stake, R. (2010). *Qualitative research studying how things work*. New York: The Guilford Press.
- Starks, H., & Trinidad, S. B. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research, 17(10)*, 1372-1380. doi:<https://doi.10.1177/1049732307307031>

- Stratone, M. E., & Vatamanescu, E.-M. (2019). The human capital dimension within the organizational equation, Gliding between virtual and traditional teams. *Management Dynamics in the knowledge Economy*, 7(4), 447-467.
doi:<https://doi.org/10.25019/mdke/7.4.01>
- Su, Y., Liang, D., & Dong, H. (2014). GSPN-based modeling of virtual teams building in collaborative process planning. *Applied Mechanics and Materials*, 496-500, 1783-1787.
doi:<http://dx.doi.org.ezproxy.liberty.edu/10.4028/www.scientific.net/AMM.496-500.1783>
- Suchan, J., & Hayzak, G. (2001). The communication characteristics of virtual teams: A case study. *Transactions on Professional Communication*, 44(3), 174-186.
doi:<https://doi.org.10.1109/47.946463>
- Surmiak, A. (2018, September). Confidentiality in qualitative research involving vulnerable participants: Researchers' perspectives. *Forum: Qualitative Social Research*, 19(3), 6-33.
doi:<https://doi.org/10.17169/fqs-19.3.3099>
- Sutton, J., & Austin, Z. (2015). Qualitative research: Data collection analysis, and management. *Canadian Journal of Hospital Pharmacy*, 68(3), 226-231.
doi:<https://doi.org/10.4212/cjhp.v68i3.1456>
- Tan, C. K., Ramayah, T., Teoh, A. P., & Cheah, J.-H. (2019). Factors influencing virtual team performance in Malaysia. *Kybernetes*, 48(9), 2065-2092. doi:<https://doi-org.ezproxy.liberty.edu/10.1108/K-01-2018-0031>
- Telej, E., & Gamble, J. R. (2019). Yoga wellness tourism: A study of marketing strategies in India. *Journal of Consumer Marketing*, 36(6), 794-805. doi:<https://doi.org/10.1108/JCM-07-2018-2788>

- Theofanidis, D., & Fountouki, A. (2019). Limitations and delimitations in the research process. *Perioperative Nursing*, 7(3), 155-162. doi:<https://doi.org/10.5281/zenodo.2552022>
- Theron, P. M. (2015). Coding and data analysis during qualitative empirical research in practical theology. *In Die Skriflig*, 49(3), 1-9. doi:<https://doi.org/10.4102/ids.v49i3.1880>
- Thomas, D. R. (2017). Feedback from research participants: Are member checks useful in qualitative research? *Qualitative Research in Psychology*, 14(1), 23-41. doi:<https://doi.org.ezproxy.liberty.edu/10.1080/14780887.2016.1219435>
- Toegel, G., & Barsoux, J.-L. (2019). It's time to tackle your teams Undiscussables. *Massachusetts Institute of Technology Sloan Management Review*, 61(1), 37-46.
Retrieved from
<http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Ftime-tackle-your-teams-undiscussables%2Fdocview%2F2335159080%2Fse-2%3Faccountid%3D12085>
- Tran, T. B., Oh, C. H., & Choi, S. B. (2016). Effects of learning orientation and global mindset on virtual team members' willingness to cooperate in: The mediating role of Self-efficacy. *Journal of Management and Organizaton*, 22(3), 311-327.
doi:<http://dx.doi.org.ezproxy.liberty.edu/10.1017/jmo.2015.37>
- Tufford, L., & Newman, P. (2010). Bracketing in qualitative research. *Qualitative Social Work*, 11(1), 80-96. doi:<https://doi.10.1177/1473325010368316>
- Turesky, E. F., Smith, C. D., & Turesky, T. K. (2020). A call to action for vital team leaders: Practitioner perspectives on trust, conflict and the need for organizational support. *Organizational Management Journal*, 17(4/5), 185-206.
doi:<https://doi.org//10.1108/OMJ-09-2019-0798>

- Uhl-Bien, M. (2006). Relational leadership theory: Exploring the social processes of leadership and organizing. *The Leadership Quarterly*, 17(6), 654-676.
doi:<https://doi.org/10.1016/j.leaquo.2006.10.007>
- Vakola, M., & Wilson, I. E. (2004). The challenge of virtual organisation: Critical success factors in dealing with constant change. *Team Performance Management*, 10(5/6), 112-120. doi:<https://doi.org/10.1108/13527590410556836>
- Van Dierendonck, D. (2011). Servant leadership: A review and synthesis. *Journal of Management*, 37(4), 1228-1261. doi:<https://doi-org.ezproxy.liberty.edu/10.1177/0149206310380462>
- Velez-Calle, A., Mariam, M., Gonzalez-Perez, M. A., Jimenez, A., Eisenberg, J., & Santamaria-Alvarez, S. M. (2020). When technological savviness overcomes cultural differences: Millennials in gloval virtual teams. *Critical Perspectives on International Business*, 16(3), 279-303. doi:<https://doi.org/10.1108/cpoib-01-2018-0012>
- Wakefield, R. L., & Leidner, D. E. (2008). A Model of Conflict, Leadership, and Performance in Virtual Teams. *Information Systems Research*, 19(4), 434-455.
- Wakefield, R. L., Leidner, D. E., & Garrison, G. (2008). A model of conflict, leadership, and performance in virtual teams. *Information Systems Research*, 19(4), 434-455.
doi:<http://doi.org/10.1287/isre1070.0149>
- Walumbwa, F. O., Hartnell, C. A., & Oke, A. (2010). Servant leadership, procedural justice climate, service climate, employee attitudes, and organizational citizenship behavior: A cross-level investigation. *Journal of Applied Psychology*, 95(3), 517-529.
doi:<https://doi.org/10.1037/a0018867>

- Watkins, T., Fehr, R., & He, W. (2019). Whatever it takes: Leaders' perceptions of abusive supervision instrumentality. *The Leadership Quarterly*, 30(2), 260-272.
doi:<https://doi.org/10.1016/j.leaqua.2018.09.002>
- Wester, K. L., Morris, C. A., Trustey, C. E., Cory, J. S., & Grossman, L. M. (2021). Promoting rigorous research using innovative qualitative approaches. *Journal of Counseling & Development*, 99, 189-199. doi:<https://doi.org/10.1002/jcad.12366>
- Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review*, 15(1), 45-59. Retrieved from <http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fart-coding-thematic-exploration-qualitative%2Fdocview%2F2210886420%2Fse-2%3Faccountid%3D12085>
- Williams, W. A., Randolph-Seng, B., Hayek, M., Haden, S. P., & Atinc, G. (2017). Servant leadership and followership creativity: The influence of workplace spirituality and political skill. *Leadership & Organization Development Journal*, 38(2), 178-193.
doi:<https://doi.org/10.1108/LODJ-02-2015-0019>
- Williamson, M., & Perumal, K. (2021). Exploring the consequences of person-environment misfit in the workplace: A qualitative study. *SA Journal of Industrial Psychology*, 47(0), 1-12. doi:<https://doi.org/10.4102/sajip.v47i0.1798>
- Witell, L., Holmlund, M., & Gustafsson, A. (2020). Guest editorial: A new dawn for qualitative service research. *Journal of Services Marketing*, 34(1), 1-7. doi:<https://doi.org/10.1108/JSM-11-2019-0443>

- Wu, B. (2013). Opportunity costs, industry dynamics, and corporate diversification: Evidence from the cardiovascular medical device industry, 1976-2004. *Strategic Management Journal*, 34(11), 1265-1287. doi:<https://doi.org/10.1002smj.2069>
- Xu, M. A., & Storr, G. B. (2012). Learning the concept of researcher as instrument in qualitative research. *The Qualitative Report*, 17(42), 1-18.
- Yin, R. (2018). *Case study research and applications design and methods*. Thousand Oaks: Sage Publication.
- Yin, R. K. (2014). *Case study research design and methods* (5th Edition ed.). Thousand Oaks: Sage Publications.
- Yue, C., & Xu, X. (2019). Review of quantitative methods used in Chinese educational research, 1978-2018. *East China Normal University Review of Education*, 2(4), 514-543. doi:<https://doi.org/10.1177/2096531119886692>
- Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *The Leadership Quarterly*, 12, 451-483. doi:[https://doi.org/10.1016/S1048-9843\(01\)00093-5](https://doi.org/10.1016/S1048-9843(01)00093-5)
- Zada, M., Zada, S., Ali, M., Jun, Z. Y., Contreras-Barraza, N., & Castillo, D. (2022). How classy servant leader at workplace? Linking servant leadership and task performance during the COVID-19 crisis: A moderation and mediation approach. *Frontiers in psychology*, 13, 810227-810240. doi:<https://doi.org/10.3389/fpsyg.2022.810227>
- Zakaria, N., & Yusof, S. A. (2020). Crossing cultural boundaries using the Internet: Toward building a model of swift trust formation in global virtual teams. *Journal of International Management*, 26, 100654-100673. doi:<https://doi.org/10.1016/j.intman.2018.10.004>
- Zakaria, N., Amelinckx, A., & Wilemon, D. (2004). Working together apart? Building a knowledge-sharing culture for global virtual teams. *Creativity and Innovation*

Management, 13(1), 15-29. doi:<https://doi-org.ezproxy.liberty.edu/10.1111/j.1467-8691.2004.00290.x>

Zdaniuk, A., & Bobocel, D. R. (2015). The role of idealized influence leadership in promoting workplace forgiveness. *The Leadership Quarterly*, 26, 863-877.
doi:<http://dx.doi.org.10.1016/j.leaqua.2015.06.008>

Zhang, Y., Li, T., Yu, X., & Tang, Y. (2022). Task interdependence and Moqi in virtual teams in China: The mediating role of virtual collaboration and the moderating role of distributive justice climate. *Chinese Management Studies*, 16(1), 1-25. doi:<https://doi.10.1108/CMS-06-2020-0264>

Zhou, Q., Hirst, G., & Shipton, H. (2012). Context matters: Combines influence of participation and intellectual stimulation on the promotion focus-employee creativity relationship. *Journal of Organizational Behavior*, 33, 894-909. doi:<https://doi10.1002/job.779>

Appendix A: Informed Consent for Permission to Use the Facility and Interview**Participants**

Date

Mr./Mrs. XXXXXXXX

Title

Organization name

Organization address

Dear [Recipient]:

As a graduate student in the School of Business at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is Leadership's role in building relationships among virtual team members and the purpose of my research is highlight the methods and tools used by leadership to aid in relationship building among virtual team members.

I am writing to request your permission to conduct my research at [business name, organization name—OR—[utilize your membership list to recruit participants for my research.

Participants will be asked to contact me to schedule an interview. The data will be used to formulate a response to my research problem. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, please respond by email to xxxxx@liberty.edu. A permission letter document is attached for your convenience.

Sincerely,

Danna Smith
Doctoral Candidate

**Appendix B: Signed Informed Consent for Permission to Use the Facility and Interview
Participants**

Please provide this document on official letterhead or copy and paste into an email. The letter/email should be returned to you, the researcher, and not the IRB. Upon receipt, please forward the response letter/email to the IRB by email.]

[Insert Date]

[Recipient]

[Title]

[Company]

[Address 1]

[Address 2]

[Address 3]

Dear Danna Smith:

After careful review of your research proposal entitled Leaderships role in building relationships among virtual team members, I have decided to grant you permission to access our membership list /staff and invite them to participate in your study.

[Retain, delete, modify, or add to the below options as applicable to your study.] Check the following boxes, as applicable:

I/We are requesting a copy of the results upon study completion and/or publication.

Sincerely,

[Your Name]

[Your Title]

[Your Company/Organization]

Appendix C: Letter of Invitation

Dear Recipient:

As a doctoral candidate in the School of Business at Liberty University, I am conducting research as part of the requirements for a Doctoral degree. The purpose of my research is to study Leadership's role in building relationships among virtual team members and I am writing to invite eligible participants to join my study. I am writing to invite eligible individuals to participate in my study.

Participants must be 18 years of age or older and lead a virtual team in an organization (manufacturing, distribution, and service) affiliated with the medical device industry in the Charlotte Metropolitan area. Participants, if willing, will be asked to participate in an audio recorded interview via video conferencing. It should take approximately 45 minutes, (but no longer than 1 hour) to complete the procedure listed. I will also ask participants to review the interview transcript for accuracy. Names and other identifying information will be requested as part of this study, but the information will remain confidential.

An informational sheet will be sent in a separate email. This document contains additional information about my research. If you are interested in participating in my research, please contact me at xxx-xxx-xxxx or by email at xxxx@liberty.edu for more information or to schedule an interview. After which I will email the informational sheet to you.

Sincerely,

Danna Smith
Doctoral Candidate
xxx-xxx-xxxx
xxxxxx@liberty.edu

Appendix D: Information Sheet

Title of the Project: Leadership's Role in Building Relationships Among Virtual Team Members

Principal Investigator: Danna V. Smith, Doctoral Candidate, School of Business, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be at least 18 years of age and serve in a leadership position overseeing a virtual team in an organization (manufacturing, distribution, and service) affiliated with the medical device industry in the Charlotte Metropolitan area.

This form is part of a process called informed consent so that you will understand this study before deciding whether to participate. Taking part in this research project is voluntary. Please take time to read this entire form and ask questions before deciding whether to take part in this research project.

What is the study about, and why is it being done?

The purpose of this study is to highlight the methods and tools used by leadership to aid in building relationships among virtual team members. More significantly will be to explore if leadership fails to encourage relationship-building among team members and its impact on companies' organizational success within the Charlotte, NC metropolitan area.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following things:

1. Participate in an interview (45 minutes to one hour). This interview will be via virtual video conference. Video conference is the preferred mode, due to the potential requirements for special equipment to record the interview in a face-to-face interaction.
2. Review the transcription of the interview for accuracy.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include understanding the importance of leadership's role in aiding in building of relationships among virtual team members.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential through the use of codes.
- Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and may be used in future presentations. After 3 years, all electronic records will be deleted.
- Recordings will be stored on a password-locked computer for three years and then erased. Only the researcher will have access to these recordings.

Is study participation voluntary?

Participation in this study is voluntary. Your decision of whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free not to answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and not included in this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Danna Smith. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at (xxx)xxx-xxxx or xxxxxx@liberty.edu. You may also contact the researcher's faculty sponsor, Dr. Melissa A. Connell, at xxxxxxx@liberty.edu.

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515; our phone number is 434-592-5530, and our email is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Appendix E: Interview Guide

The interview questions below were developed to provide a guide for the interview process. The intent of the questions is to develop conversation between the interviewer and the participant to develop answers to the proposed research questions. The interview questions are divided into three parts. Part one will help to understand the dynamics of the team. Part two is to understand the level of collaboration among team members and part three is to help understand the leader's perspective on what is necessary to drive collaboration so relationships can develop among team members. The open-ended questions will allow for open and honest conversations with leadership and gain an understanding of the perception of whether their role is critical to relationship building among team members. The first three questions are basic closed-ended questions that will help establish the team's characteristics and the leader's position.

Part One

- I. What is the team leader's area of responsibility to the organization?
- II. How many members on the team?
- III. What are the roles and responsibilities of team members?
- IV. Location of team members?
- V. Do the roles of team members require them to interact?

Part Two

- VI. How does the team leader ensure team members interact?
- VII. How does leadership measure if the interactions have a positive influence on organizational success?
- VIII. Is collaboration among team members used to address problems or challenges that the members face?

- IX. How does this collaboration benefit the team?
- X. How does this collaboration benefit the individual members?

Part Three

- XI. What tools are used for daily communication among the team members?
- XII. Do team members bring challenges to each other for discussion, or are you, the leader, involved in these discussions?
- XIII. Do team members discuss likes, dislikes, hobbies, or other topics that don't pertain to business?
- XIV. Are there any team building activities or tools used to build trust and confidence among team members?
- XV. Are there planned meetings that enable team members to come together in a face-to-face environment?

The researcher will verbally ask each question and allow the participant to answer. Both the questions and answers will be audio recorded and transcribed. The information will remain confidential and secure. After three years from approval of the research, the interviews will be destroyed.

Appendix F: IRB Approval Letter**LIBERTY UNIVERSITY.**
INSTITUTIONAL REVIEW BOARD

August 21, 2023

Danna Smith
Melissa Connell

Re: IRB Exemption - IRB-FY22-23-1803 Leadership's role in building relationships among virtual team members

Dear Danna Smith, Melissa Connell,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

For a PDF of your exemption letter, click on your study number in the My Studies card on your Cayuse dashboard. Next, click the Submissions bar beside the Study Details bar on the Study details page. Finally, click Initial under Submission Type and choose the Letters tab toward the bottom of the Submission Details page. Your Information sheet and final versions of your study documents can also be found on the same page under the Attachments tab.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, PhD, CIP
Administrative Chair
Research Ethics Office