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Successful Project Management

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Walden University

College of Management and Technology

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Tomomi Horning

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Walden University
2018

Abstract

Successful Project Management

by

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MS, The Pennsylvania State University, 2010

BS, Bentley College, 2002

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

March 2018

Abstract

High project failure rates result in billions of wasted dollars each year. Project failure does not discriminate by type of project or the industry from which they originate. The purpose of this qualitative single case study was to explore strategies that leaders at a health care organization located in Pennsylvania use to manage projects successfully. This population was selected due to the health care organization's reputation for successful project completion. The conceptual framework for this study was Fiedler's contingency theory. Data were collected by conducting semistructured interviews with 9 project leaders and reviewing project documents provided by study participants. Interviews were transcribed, thick descriptions were obtained, and participants were engaged in member checking. The thematic data analysis process consisted of compiling and coding data, identifying patterns, and organizing themes into relevant categories, iteratively. Findings were organized into 4 thematic categories, which were, essential strategies, relationship management, best practices, and self-attunement. Findings from this study may contribute to positive social change if health care leaders can use the information to enhance their project leadership capabilities. When project managers are successful, the benefits cascade to health care organizations. Leaders of those health care organizations can ensure that important health and wellness services are provided and available to those who need them, fund performance improvement initiatives, resource quality programs, and offer innovative services to improve health outcomes for individuals and communities.

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Dedication

I dedicate this doctoral study to my husband, David, and children, Caleb and Sarah. You have shown me so much love and patience over the last several years. Thanks for your sacrifice, graciousness, and support so that I could complete my doctorate; I love you all so much! Also, to all my family, friends, and colleagues who supported and prayed for me over the last six years, I would like to express my sincere appreciation and gratitude, thank you!

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Section 1: Foundation of the Study

Background of the Problem

Abdallah (2014) found that successful project implementation is elusive in health care. The complex nature of the health care industry and the complex nature of projects within health care might contribute to the lack of project success. For example, Flynn and Hartfield (2016) referred to health care quality improvement initiatives as being complex due to multiple active components, referring to the complex interplay among stakeholders (patients, providers, and clinical units), processes, and outcomes. Baird and Boak (2016) and Garrety, McLoughlin, Dalley, Wilson, and Ping (2016) similarly noted significant challenges associated with electronic health (or medical) records (EHRs or EMRs) projects. While Schuller, Kash, and Gamm (2015) found that organizational factors such as leadership, culture, and corporate processes influence project success in health care, these findings are neither tangible nor concrete to benefit project managers. The health care industry is facing tremendous challenges, such as escalating health care costs, decreasing reimbursement, changes in legislation, and other factors (Mehta & Ahmad, 2016). It is not enough to analyze the themes associated with projects but to identify the strategies that contribute to project success. Through this case study, I explored ways in which one health care organization modeled successful project management practices.

Problem Statement

Projects continue to fail at an astounding rate regardless of the type of project, or the industry from which they originate (Ramazani & Jergeas, 2015), wasting billions of

dollars each year (Harrington & Frank, 2015). Harrington and Frank (2015) found that 75% of projects failed before they ever reached implementation. The general business problem was that some business leaders experience poor project performance, resulting in wasted resources, and therefore a loss in profitability. The specific business problem was that some project leaders lack strategies to manage projects successfully.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies that leaders use to manage projects successfully in health care. The population consisted of project leaders at a health care organization located in Pennsylvania, who complete projects successfully on a routine basis. Successful projects are ones that finish on time and on budget and that meet the requirements listed in the project charter.

This study might contribute to positive social change if health care leaders can use the information to enhance organizational performance. The success of health care organizations directly influences their ability to uphold their mission statements. Health care facilities exist to serve individuals and communities; therefore, enhancing their performance can have a cascading positive effect on society. When health care organizations are successful, the leaders of those organizations can ensure that important health and wellness services are made available to those who need them. Additionally, leaders of successful health care organizations can fund performance improvement initiatives, support quality programs, and offer innovative services to individuals and communities to improve health outcomes.

Nature of the Study

Researchers use the qualitative method when they are exploring an in-depth issue in its original context (Yin, 2014). The qualitative method applied to this study because understanding project management strategies within the context of health care requires a thorough exploration of specific cases of project success. Conversely, quantitative methods were not appropriate to answer the proposed research question. Quantitative studies apply statistical and mathematic methods to examine variables, their relationships, and outcomes (Turner, Balmer, & Coverdale, 2013). I did not seek to examine correlations or test hypotheses. Finally, mixed methods research occurs when researchers combine elements of the qualitative and quantitative methods (Riazi & Candlin, 2014). Because I did not require quantitative data to answer my research question, the mixed methods approach was not appropriate.

Qualitative methods include several designs such as case study, phenomenology, narrative, and ethnography. Yin (2014) indicated that case studies are applicable when researchers are exploring the *how* and *why* questions of a phenomenon. Additionally, a case study is analysis-driven (Hyett, Kenny, & Dickson-Swift, 2014). Because the research question for this study required an in-depth analysis into how and why certain project management strategies are successful in health care, the case study approach was most appropriate.

Conversely, the phenomenological, narrative, and ethnographic designs were not well suited for use in this study. The phenomenological design is applicable when exploring individuals' perceptions and experiences about a topic or event (Finlay &

Elander, 2016). Because this study was not about individuals' perceptions or lived experiences, it was not appropriate to use this design. Similarly, researchers use the narrative design to explore specific life stories of research subjects (Jeppesen, 2016). The purpose of this study was to uncover project success strategies, not individuals' life stories, making the narrative design inappropriate. Finally, ethnography is a complex undertaking where researchers immerse themselves within specific contexts from which the data is derived (Sarmiento, Gysels, Higginson, & Gomes, 2017). Immersion was not necessary for this proposed study. Therefore, ethnography was also not an appropriate design.

Research Question

The research question was, what strategies do leaders use to manage projects successfully in health care?

Interview Questions

There were seven interview questions that I used to answer the research question.

1. What strategies do you use to manage the relationship dynamics, engagement, and support among the project stakeholders?
2. What strategies do you use to handle project attributes such as project scope, timelines, budgets, risk, quality, and complexity?
3. What leadership strategies do you use to successfully manage the project?
4. What strategies do you use to gain support and resources from your organization provide to ensure project success?

5. How do you leverage or mitigate organizational characteristics, such as governance, structure, systems, incentives, and cultural factors to ensure your successful management of projects?
6. What other strategies are critical for project success in health care?
7. What other information would you like to share about the way you achieve project success?

Conceptual Framework

Contingency theory was introduced in 1964 by Fiedler as a leadership effectiveness model. Fiedler (1964) proposed that leadership effectiveness comprises two factors, (a) leaders' personality and (b) the situation in which the leaders find themselves. Though Fiedler's (1964) original contingency theory dealt with leadership effectiveness, contingency theory in recent years has been broadened to describe a class of theories that propose that outcomes are contingent on a variety of factors. The reenvisioned and more general contingency perspective resonates in the field of project management (Shenhar, 2001; Teller, Kock, & Gemünden, 2014) because studies in the field of project management continue to produce contradictory findings. These contradictory findings give credence to the idea that environmental and situational factors affect project management efficacy (Teller et al., 2014). Therefore, in a field absent of a strong theoretical underpinning (Teller et al., 2014), contingency theory is relevant and aligns with the experiences of practitioners. In project management, like many business practices, there are no panaceas and contingencies are pervasive, thereby making contingency theory the most appropriate conceptual framework for this study. Through

the lens of contingency theory, I uncovered project success strategies, which may be considered contingencies.

Operational Definitions

Electronic health (or medical) record (EHR or EMR): EHRs are comprehensive systems that store and analyze patient data (such as demographic, clinical, and financial) to help health care providers care for patients (Scholte et al., 2016).

Project Management Institute's Project Management Book of Knowledge (PMI PMBOK): The PMBOK is a collection of widely accepted project management practices, processes, vocabulary, and standards (Mesquida & Mas, 2014).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are conditions recognized as true though they cannot be verified (Madsen, 2013). How researchers define assumptions affects the parameters of research and is essential to the practical application of the research findings (Foss & Hallberg, 2014). One assumption was that the organization selected for this case study was appropriate for the study. A similar assumption was that the participants selected for interview have served in project management roles and not just as project team members. A way to mitigate this risk was to verify participants' experience in managing projects with the organization's project management support office. A third assumption is that participants understood the interview questions and answered them honestly. A fourth assumption was that project documents shared with me are those actually used and not just templates.

Limitations

Limitations are study weaknesses not under researchers' direct control (Soilkki, Cassim, & Anis, 2014). There were several limitations within this proposed study. The first limitation involved the eligibility criterion that participants must have led projects that executive managers deemed successful. I defined successful projects as ones that finish on time and on budget and that meet the requirements listed in the project charter. However, there may have been slight variability in executives' interpretation of these criteria, which was out of my control. A second limitation was that I only reviewed documents produced by the study participants from the case organization. Some files might not have been recoverable due to loss, misplacement, or other reasons out of my control. A final limitation was that, because this was a case study, transferability was not possible outside of the case organization.

Delimitations

Delimitations are necessary to define the scope of a study (Rovai, Baker, & Ponton, 2014). Projects are temporary activities that yield a specific product or service (Project Management Institute, 2013). Therefore, any study participant must have participated in a project according to the PMBOK definition of a project. Out of scope were endeavors that did not yield a specific product or service apart from normal daily operations. These were typically ongoing activities that do not have finite beginning and ending dates.

Within the scope of this study was any facility that operated under the auspices of the health system under study. Similarly, projects originated from any discipline or

department within the health system. Examples included quality, facilities, clinical units, and information technology departments. Finally, participants and project documents that met the previously aforementioned criteria were within scope of this study.

Significance of the Study

The findings and recommendations from this study may be of value to the field of business. Projects continue to fail at an astounding rate regardless of the type of project, or the industry from which they originate (Ramazani & Jergeas, 2015), wasting billions of dollars each year (Harrington & Frank, 2015). Wasted resources are unproductive and can undermine overall business success and competitive advantage of health care organizations. The purpose of this qualitative single case study was to explore strategies leaders use to manage projects successfully in health care. If project leaders understand project management strategies better, it may improve project success rates and decrease wasted resources. Leaders of business who can optimize their resources have the potential to increase overall business success.

Contribution to Business Practice

Researchers (Anholon & Sano, 2016; Bildosola, Río-Belver, Cilleruelo, & Garechana, 2015; Iqbal, Ali, Yue, & Briand, 2015; Qianqian, Lieyun, & Skibniewski, 2017) have studied project management in fields where the discipline of project management is more common, such as information technology, construction, and others. However, health care is a unique industry. Therefore, a study of project management within the context of health care may enhance health care professionals' understanding of the practice of project management. In the health care industry, which is only beginning

to adopt the formal project management methodologies, this study might provide practical applications.

Additionally, though many health care organizations are not-for-profit, they are businesses whose leaders must achieve positive bottom lines for the facilities to remain operational. Therefore, it is critical for leaders to understand how to manage health care projects with better efficiency and outcomes. A case study of health care project management success strategies may help leaders manage projects effectively. Consequently, health care organizations may enhance expense management, improve project quality outcomes, increase adherence to schedules and project timelines, meet stakeholder expectations, and make other improvements.

Implications for Social Change

This study may contribute to positive social change if health care leaders can use the information to enhance organizational performance. The success of health care organizations directly influences their ability to uphold their mission statements. Health care facilities exist to serve individuals and communities. Therefore, enhancing their performance has a cascading positive effect on society. When health care organizations are successful, the leaders of those organizations can ensure that important health and wellness services are made available to those who need them. Additionally, leaders of successful health care organizations can fund performance improvement initiatives, support quality programs, and offer innovative services to individuals and communities to increase health outcomes.

A Review of the Professional and Academic Literature

The purpose of this qualitative single case study was to explore what strategies leaders use to manage projects successfully in health care. I primarily searched peer-reviewed scholarly literature dated 2013 and newer available through the Walden University library. Select sources older than 5 years were included but were minimal. I used a variety of databases such as Academic Search Complete, ProQuest, ScienceDirect, Business Source Complete, ABI/INFORM, Emerald Insight, and Google Scholar. *International Journal of Project Management* and *Project Management Journal* were prominent titles, as these are two premier journals in the field of project management. However, in order to gain a broad understanding of project management, I explored many different journals. Keywords and phrases I used in my search included *project management, project management methodology, project success, project failure, health care*, and various combinations thereof. In addition to scholarly sources, I used journal articles not considered peer-reviewed as well as some books. I refrained from using trade publications and web sources in the literature review.

Table 1 shows the date and type of sources utilized in the study. Walden University requires students to have 85% of their sources from peer-reviewed publications with a publication date within 5 years of the anticipated doctoral study completion date. As shown in Table 1, I used 263 total sources in this study and project. Of the total sources, 90.9% were peer-reviewed, and 89.4% were within 5 years of the anticipated completion date.

Table 1

Summary of References

	2017	2016	2015	2014	2013	Older	Total
Academic, peer-reviewed journals	27	64	51	43	33	21	239
Journals, not peer-reviewed		1	1		2	2	6
Books		1	1	3	3	7	15
Web	1	1				1	3
Total	28	67	53	46	38	31	263

Table 2 displays the date and type of sources utilized in the literature review only. The contents in Table 2 are a subset of those in Table 1. As shown in Table 2, I used 137 total sources in the literature review. Of these sources, 89.8% were peer-reviewed, and 86.1% were within the 5-year period of the anticipated completion date.

Table 2

Literature Review References Summary

	2017	2016	2015	2014	2013	Older	Total
Academic, peer-reviewed journals	12	35	28	22	16	10	123
Journals, not peer-reviewed		1	1	1	1	2	6
Books				1		7	8
Total	12	36	29	24	17	19	137

Contingency Theory

Parker, Parsons, and Isharyanto (2015) argued that the discipline of project management lacks a robust theoretical underpinning. While theories related to the independent halves of project and management exist, no theory alone offers a comprehensive conceptual framework that adequately supports the field of project

management (Koskela & Howell, 2008). However, Miterev, Engwall, and Jerbrant (2016) and Sauser, Reilly, and Shenhar (2009) suggested a plausible explanation regarding the absence of a dominant theory. Miterev et al. and Sauser et al. argued that a one-size-fits-all approach is not appropriate for the project management discipline and furthermore criticized project management practitioners and researchers for attempting to identify a singular applicable theory. Maqbool, Manzoor, and Rashid (2017) concurred and indicated that project success hinges on multiple factors. Therefore, I used contingency theory as the conceptual framework for this present study.

Contingency theory was introduced in 1964 by Fiedler as a leadership effectiveness model. Fiedler (1964) proposed that leadership effectiveness comprises two factors: (a) leaders' personality and (b) the situation in which the leaders find themselves. Fiedler described leaders' personality as either task motivated or relationship motivated, as measured by the Least Preferred Coworker Scale (LPC). The LPC helps leaders identify whether they are task or relationship oriented. High scores on the scale indicate that the individual is relationship motivated, and low scores indicate a preference for task motivation (Fiedler, 1964). According to Fiedler, there is no superior personality style. Leaders can be effective regardless of their score, as long as the situation in which they find themselves is conducive to that style.

Situations have three characteristics defined by (a) leader-member relations, (b) task structure, and (c) position power of the leader. Leader-member relations refers to the rapport between leaders and their subordinates (Fiedler, 1964). Task structure is the extent to which goals are well defined or not; well-defined goals are those that are

unambiguous and highly structured (Fiedler, 1964). Leader position power is the legitimate authority the leader has by title or job role (Fiedler, 1964). Fiedler (1964) concluded that the more control leaders exert in determining situational factors, the more effective they will be. Similarly, to increase leader effectiveness, situations around the leader should be adapted to suit the leader's personality style (Fiedler, 1964). This is because leader personalities may be relatively stable and unchangeable, leaving situational context as the only dynamic variable (Fiedler, 1964).

There are strong critics of Fiedler's (1964) original theory, even Fiedler himself. Fiedler (1971) explained the limitations of his study, indicating that his model was supported by field study data, not laboratory data. Ashour (1973b) was a prominent critic and argued that Fiedler's empirical data did not support his primary hypothesis. Ashour (1973a) also asserted that Fiedler's model failed validity tests. Weill and Olson (1989) indicated that the contingency variables chosen for any empirical studies were too few and therefore not comprehensive enough to draw larger conclusions about the effectiveness of the model in complex organizations. Weill and Olson also indicated that Fiedler drew several conclusions regarding causality, despite his not having used methodologies suitable for such deductions. Finally, Schoonoven (1981) argued that contingency theory lacked a robust explanation of contingency variables and that interrelationships among variables were underdeveloped.

Though Fiedler's (1964) original contingency theory dealt with leadership effectiveness, contingency theory in recent years has also been used to describe a class of theories that propose that outcomes are contingent on a variety of factors. For example,

Gupta and Batra (2015) studied environmental contingency theory, and Otley (2016) explored contingency theory as it applies to management accounting and control. The reenvisioned and more generic contingency perspective resonates in the field of project management (Shenhar, 2001; Teller et al., 2014). The appeal of the broader interpretation of the contingency perspective might be due to the contradictory findings produced in the field of project management. In a field absent of a strong theoretical underpinning (Teller et al., 2014), contingency theory is relevant and aligns with the experiences of practitioners.

Shenhar (2001) further opined that traditional contingency theory as it was presented decades ago is inadequate for the complex business environment in which projects operate today. While Fiedler's (1964) original model outlined only two variables, which drew criticism that contingency theory was too narrow or too unrealistic, current researchers are studying more variables. For example, Teller et al. (2014) studied five contingency factors: (a) formal project risk management practices, (b) integration of risk information into project portfolio management, (c) research and development focus of project portfolios, (d) external turbulence, and (e) portfolio dynamics. Netland (2015) studied four in the context of a lean project implementation: (a) corporation, (b) factory size, (c) stage of lean implementation, and (d) national culture. Researchers today have interpreted contingency theory in a broader way that can be adapted to a variety of situations. In project management, as in many business practices, there are no panaceas and contingencies are pervasive, thereby making contingency theory the most appropriate conceptual framework for this study.

There were alternative theories that I explored for this study. For example, Parker et al. (2015) suggested theory of constraint (TOC) and resource-based theory (RBT) of competitive advantage. Alternatively, Padalkar and Gopinath (2016) posited the relevance of complexity theory. I examined these three theories for their applicability.

TOC. Goldratt and Cox's (1984) theory is founded on the belief that organizations are comprised of multiple links that form a chain and firms can only be as successful as their weakest link. The TOC includes five actions that help organizational leaders eliminate conditions that constrain organizations from achieving their goals. The first is to identify system constraints (Goldratt & Cox, 1984). The second is to determine how to exploit constraints (Goldratt & Cox, 1984). To exploit a constraint means to make the most of the constraint or making the constraint as effective as possible given its limitations (Goldratt & Cox, 1984). Third, Goldratt and Cox explained that the firm and its activities should subordinate to constraints. To subordinate the firm and its activities to constraints means that organizational activities and processes should be modified to best work with the constraint (Goldratt & Cox, 1984). The fourth action is to elevate constraints, which is similar to the third action (Goldratt & Cox, 1984). To elevate constraints means to prioritize addressing the constraints or resourcing constraints to minimize their undesirable effects. Finally, Goldratt and Cox embedded the concept of continuous improvement into their theory, instructing followers to repeat the process by identifying additional constraints.

Though TOC is widely applicable, Goldratt (1997) interpreted TOC principles specifically for the project management field and developed the critical chain project

management (CCPM) methodology. Goldratt's recommendations consisted of two parts. The first was to reduce buffers throughout project life cycles, which he argued were prone to estimation errors (Goldratt, 1997). Second, Goldratt indicated that project leaders should embed buffers at key points, such as before significant project tasks and at the end of projects, and when resource needs were substantial or critical to project success. CCPM methodology is a form of applied TOC within project management but not a theory (Şimşit et al., 2014). Therefore, CCPM methodology cannot serve as the conceptual framework for this study. Moreover, TOC is not an appropriate conceptual framework for this study for two reasons. First, TOC has as one of its principal components continuous process improvement. Projects are by nature temporary, with the purpose of achieving project charter goals (Padalkar & Gopinath, 2016). Projects have a definite beginning and end (Project Management Institute, 2013); therefore, the concept of continuous improvement is inconsistent with the definition of a finite project. Second, my research question was related to project success strategies, not project constraints. Therefore, using a theory focused on constraints was incongruent with the purpose of this study.

RBT. Barney (1986) developed the RBT to explain the influence organizational resources and skills had on organizational performance, namely competitive advantage. Barney also challenged the mainstream thought of the time related to product markets and instead argued that strategic factor markets are critical to firm success. Strategic factor markets are markets where resources required for strategy implementation are obtained by firms (Barney, 1986). Barney indicated that organizations could outperform

their competitors if they can purchase resources for less than what their competitors believe the future value of those resources would be. Grant (1991) extended Barney's (1986) theory by outlining five components that comprise the resource-based approach framework. First, leaders need to identify and classify the firm's resources (Barney, 1991). Identifying and classing firm's resources includes assessing strengths, weaknesses, and opportunities for resource usage. Second, leaders need to identify the organization's capabilities (Barney, 1991). Based on the capabilities, leaders should determine the resources required to realize the capabilities (Barney, 1991). Third, leaders need to assess the market value of resources in the short and long term (Barney, 1991). For example, leaders should evaluate whether the resources can sustain competitive advantage in the long term as well as calculate financial returns in the short term (1991). Fourth, leaders need to select the strategy that uses resources most effectively (Barney, 1991). Finally, Barney (1991) reasoned that leaders need to identify resource gaps and invest in addressing those gaps continually.

Several authors (Mathur, Jugdev, & Fung, 2014; Wen & Qiang, 2016) used RBT as the theoretical underpinning to their studies. Wen and Qiang (2016) explored organizational enablers (OE) for project management in China, where OEs were considered organizational resources. Wen and Qiang posited that OEs for project, program, and portfolio management were intangible and inimitable firm resources. Similarly, Mathur et al. (2014) used RBT to indicate that project management capabilities were organizational resources. While RBT applies to project management, it is limited in its focus on organizational resources. Because the research question was broader and

involved a variety of project success strategies, RBT was not an appropriate conceptual framework for this study.

Complexity theory. Kauffman (1993) introduced complexity theory as a way to explain the way variables in a complex system interact. Uhl-Bien and Arena (2017) described complexity theory as a model that accounts for rich interconnectivity. Complex systems are different from complicated ones (Uhl-Bien & Arena, 2017). Complexity theory applies to any systems, such as social, biological, computational, and others (Kauffman, 1993). Kauffman indicated that complexity theory had several properties: (a) nonlinearity in relationships, (b) multiple causation, (c) unboundedness, (d) emergent design, and (e) includes agents that have self-organizing tendencies. Nonlinearity in relationships means that interactions between component variables within a system are not predictable, proportional, nor static; they are dynamic (Kauffman, 1993). Multiple causation refers to the existence of multiple origins of change and transformation (Kauffman, 1993). Unboundedness reflects the openness of systems; clear parameters that demarcate the system do not exist (Kauffman, 1993). Emergent design refers to the capability of systems to reveal new information, change relationships, or otherwise influence the system through dynamic interactions (Kauffman, 1993). Given these characteristics, Marion, Christiansen, Klar, Schreiber, and Erdener (2016) associated complexity theory with the phrase, edge of chaos. Uhl-Bien and Arena explained that interactions among variables within complicated systems produce larger or more complex products within the system. Additionally, interactions among variables within complex systems yield outputs that are fundamentally different from the original

components (Uhl-Bien & Arena, 2017). Therefore, results from complex systems are unexpected, long lasting, and pervasive (Uhl-Bien & Arena, 2017).

Applied to project management, however, Padalkar and Gopinath (2016) indicated that researchers disagree on the definition and composition of complexity. Moreover, while characteristics such as nonlinearity and multiple causation coincide with the practice of project management, there are several issues with complexity theory. The first issue is unboundedness. Projects are defined and temporary (Project Management Institute, 2013), making them bound. The second problem is the concept that agents within systems have self-organizing tendencies. The existence of agents with self-organizing tendencies is in direct conflict with the role of project managers, who direct and manage projects. If agents within systems were self-organizing, there would be no need for managerial oversight of projects. Multiple authors (Aronson, Shenhar, & Patanakul, 2013; Boonstra, 2013; Hermano & Martin-Cruz, 2016; Unger, Rank, & Gemünden, 2015) have found that project leadership is critical to project success. Because of the issues related to boundedness and agents with self-organizing tendencies, I did not believe complexity theory was appropriate to use as the conceptual framework for this study.

Importance of Projects and Project Management

There are many reasons why projects and effective project management are important to businesses. One of the most basic functions of projects is to serve as a component to business operations (Valčić, Dimitrić, & Dalsaso, 2016). Killen and Hunt (2013) concurred, indicating that business operations facilitate resource allocation to

accomplish work, which is the function of projects. Valčić et al. (2016) further posited that projects create and retain business value. Therefore, one might conclude that projects provide an opportunity to undertake the core businesses of firms, which generates business value.

However, projects are not limited to business operations. Projects can also be effective in implementing corporate strategy (Hyväri, 2016; Sánchez & Schneider, 2014; Serra & Kunc, 2015). Sánchez and Schneider (2014) referred to projects as vehicles for realizing organizational strategy. Serra and Kunc (2015) agreed and indicated that projects are essential in converting corporate vision into reality. In other words, while projects themselves may not be the final goal, they are instrumental in moving organizations toward their goals. For example, leaders who wish to embrace environmental sustainability as one of their corporate strategies may use projects to demonstrate organizational sustainability endeavors (Sánchez & Schneider, 2014). Specifically, Sánchez and Schneider found that firms used the project framework to convert supply chains to include green manufacturers.

Beyond projects serving as strategy execution framework, Hyväri (2016) believed that the project concept was critical for achieving organizational transformation initiatives. Transformation of a business may imply rebranding or a total reimagination of the business itself, which has the potential to affect the corporate mission. Therefore, successful projects and project execution are relevant concepts for not just implementing but also managing corporate strategy. Relatedly, Leybourne and Sainter (2013) suggested that management by projects, a bottom-up approach where projects inform new

corporate strategies, was a changing paradigm that business leaders should consider. Both of these authors' ideas imply the importance of projects in contributing to the continuous cycle of monitoring, evaluating, and developing corrective strategies to achieve organizational objectives.

Finally, Koh and Crawford (2013) suggested that as projects serve as catalysts for new strategy development, in doing so they drive competitive advantage and business success. Killen and Hunt (2013) found that organizations that have responsive decision-making environments embed targeted idea generation activities to capitalize on project ideas. Killen and Hunt labeled the resulting projects explorative, geared toward long-term strategic success. Competitive advantage can also stem from partnerships that arise from projects. DeFillippi and Roser (2014) referred to these as cocreation projects, where different organizations engage in collaborative ventures to yield strategic innovation. By leveraging the strengths of project-partner organizations, the participating firms achieve a competitive advantage over others in the market. Cocreation projects promote strategy development by (a) enhancing innovation capabilities, (b) speeding up product-to-market cycles, (c) reducing cost of existing innovation approach, (d) minimizing disruption to existing operations, and (e) promoting continuous quality improvement to increase firm's competitive position (DeFillippi & Roser, 2014). Additionally, cocreation projects are scalable and repeatable. Partner organizations engage in mutual risk sharing, optimize collective resources, focus on value creation (by engaging a broader range of stakeholders), and ultimately share in strategic benefits (DeFillippi & Roser, 2014).

Why Projects Fail

The extant literature is replete with different researchers' perspectives on why projects fail. However, Serra and Kunc (2015) suggested that absent a consensus definition of project success, project failure is difficult to understand. Therefore, in this section, I outlined common reasons why project fail. The categories are (a) people issues, (b) process issues, and (c) project issues.

People issues. Multiple authors attributed project failure to problems related to lack of or failed communication within projects (Dwivedi et al., 2015; Longenecker & Longenecker, 2014; Stanley & Uden, 2013). While communication is related to the people-dimension (as senders and receivers of messages), in this section, I reviewed problems related to peoples' skills, dispositions, and attitudes. Dwivedi et al. (2015) found that people issues exist at multiple levels of project and organizational authority. For example, insufficient project sponsorship by top-level leaders, weak project personnel, and lack of end-user involvement in usability testing contribute to project failure (Dwivedi et al., 2015).

Multiple authors (Albliwi, Antony, Abdul Halim Lim, & Van der Wiele, 2014; Longenecker & Longenecker, 2014; Stanley & Uden, 2013) also concluded that insufficient project sponsorship indicated a lack of clear senior leader ownership and support of projects. Similarly, Flyvbjerg (2014) found that weak leadership and leaders' perceptions that their projects were special, (uniqueness bias), prevented them from applying lessons learned from other projects, contributing to higher levels of project failure. Flyvbjerg's findings were limited to megaprojects, large-scale, multiyear,

transformational projects costing \$1 billion or more. However, Duffield and Whitty (2015) concurred, stating that failure to learn from lessons learned is a pervasive problem, influenced substantially by the people and culture of an organization.

Stanley and Uden (2013) also argued that there are multiple issues at the project team level. For example, lack of team integration and project leaders' inability to engage stakeholders effectively were common problems (Stanley & Uden, 2013). Dwivedi et al. (2015) also indicated that teams lack attentiveness to policies, realistic expectations of the project, and motivation. Additionally, project teams suffer from wishful thinking and friction among both internal and external project participants (Dwivedi et al., 2015). In summary, these deficiencies point to undeveloped, underdeveloped, or ineffective project management skills (Anthopoulos, Reddick, Giannakidou, & Mavridis, 2016; Dwivedi et al., 2015; Flyvbjerg, 2014; Hjelmbrekke, Hansen, & Lohne, 2015; Stanley & Uden, 2013).

Process issues. Process issues also contribute to project failure. First, there are process issues related to translating strategic goals of the organization into tangible projects (Hjelmbrekke et al., 2015). If organizational leaders are unable to outline how organizational strategies will be realized, it is difficult to initiate appropriate projects and move them to completion successfully. Second, process issues exist throughout projects' lifecycles. For example, Albliwi et al. (2014) indicated that poorly designed project selection and prioritization processes for Lean Six Sigma projects in health care are partially to blame for project failure. These are front-end issues; however, process issues exist in other areas of the project's lifecycle such as project planning (Anthopoulos et al.,

2016). For example, Hussain and Mkpojiogu (2016) discussed a poorly engineering requirements process for software development, and Stanley and Uden (2013) found that proposal evaluation processes were flawed. On the back-end of projects, Hjelmbrekke et al. (2015) indicated that limited accountability processes associated with projects' results hindered project success.

While in the previous paragraph I discussed specific processes regarding the project lifecycle, there are also challenges related to selecting the most appropriate process approach. A highly structured project management approach is typically associated with formal project planning activities (Cleland, 2007) that span the entire project lifecycle (Jamieson & Morris, 2007). While structured processes are necessary to maintain control, flexibility is also required. Process flexibility is also needed for creativity, the emergence of new ideas, and disruptive innovation that can provide organizations a chance at competitive advantage (Artto & Dietrich, 2007; Jerbrant & Gustavsson, 2013; Leybourne & Sainter, 2013; Zuo, Zillante, Zhao, & Xia, 2014).

Project issues. Dao, Kermanshachi, Shane, Anderson, and Hare (2016) referred to project complexity as variables that confound, complicate, or otherwise make projects difficult to manage. Floricel, Michela, and Piperca (2016) indicated that project complexity often results in uncertainty, risk, and cost. In other words, there is an inverse relationship between project complexity and project success (Moore, Payne, Autry, & Griffis, 2016). The implication of these complexity variables is that because they are often highly dynamic (Khattack, Mustafa, & Shah, 2016), project teams must make continual adjustments to their project plans. Because most of these factors are

multifaceted, it makes project management more complex and potentially compromises project success.

Some project complexity factors are internal, relating to variables such as changing project type and size (Dao et al., 2016), volume of stakeholders each with different needs and perspectives (Khattack et al., 2016; Klein, 2016), and magnitude of change orders and frequency of workarounds (Kermanshachi, Dao, Shane, & Anderson, 2016). Others are more logistical, such as permitting and approvals (Dao et al., 2016) or technological challenges related to interfaces (Khattack et al., 2016). The final complexity category relates to macro environmental factors such as dynamic market conditions (Khattack et al., 2016), geopolitical and social issues (Dao et al., 2016), and social and cultural systems (Klein, 2016).

Unique Characteristics of Project Management in Health Care

In this section, I described three characteristics that make project management in health care unique. They are (a) prioritization of stakeholder management, (b) pilotism, and (c) emphasis on project execution.

Prioritization of stakeholder management. Professionals have viewed project management as a discipline characterized by planning and control (Meng & Boyd, 2017). However, Meng and Boyd (2017) concluded that project management has shifted away from a traditional focus on planning and control and instead has embraced concepts related to relationship management, valuing people, and working relationships (Meng & Boyd, 2017). Project Management Institute (2013) indicated that relationship management is a component of stakeholder management. Stakeholder management in

health care projects is critical to project success (Eskerod & Vaagaasar, 2014).

McAlearney, Hefner, Sieck, and Huerta (2015) found that some clinician stakeholders in an EHR implementation project experienced emotional distress, feelings of personal loss and grief in replacing their paper charts.

The interpretation of McAlearney et al.'s (2015) findings is that health care project leaders should prioritize stakeholder management. In health care, stakeholder management equates to gaining staff and clinicians' buy-in and generating professional enthusiasm for various projects (Andreassen, Kjekshus, & Tjora, 2015). Though in some cases stakeholders have competing interests (Boonstra, van Offenbeek, & Vos, 2017), Andreassen et al. (2015) explained that generating project enthusiasm is essential in health care because it results in more engaged clinicians, reduces the necessity of governance oversight, and elevates organizational performance. Additionally, Morgan, Grande, Carter, Long, and Kangovi (2016) found stakeholder management so critical that they listed it as step number one in their project planning process.

There are several examples that underscore the importance of stakeholder management in health care (Escobar-Rodríguez & Romero-Alonso, 2014; Guédon et al., 2015). Escobar-Rodríguez and Romero-Alonso (2014) observed that for a computerized prescriber order entry (CPOE) project, hospital managers began implementing CPOE in areas that were more receptive to change. Because early adopters of CPOE responded to the implementation with a positive attitude, project acceptance among late adopters also increased (Escobar-Rodríguez & Romero-Alonso, 2014). In another example, Guédon et al. (2015) implemented a radio frequency identification (RFID) technology project at a

hospital using the participatory design (PD) method. Guédon et al. (2015) reported that using a PD approach involved a multidisciplinary team that participated in the design, testing, evaluation, implementation, and redesign cycles of the entire project lifecycle. Having a multidisciplinary team meant that end users of the system were included in the decision-making process and were actively engaged in the iterative cycles necessary for project implementation (Guédon et al., 2015). In both project cases, Escobar-Rodríguez and Romero-Alonso and Guédon et al. demonstrated the prioritization of stakeholder management.

Pilotism. Project pilots often test or validate project implementation on a small scale before full-scale operationalization (Andreassen et al., 2015; Oostveen, Ubbink, Mens, Pompe, & Vermeulen, 2016). Pilots are used heavily in health care project management (Forster et al., 2016; Kapu, Wheeler, & Lee, 2014; Mappilakkandy, Krauze, & Khan, 2014). Projects that fail to meet goals or objectives are often terminated (Oostveen et al., 2016). However, project leaders might run the risk of prematurely terminating projects based on initial project pilot data (Oostveen et al., 2016). Another issue related to project pilots is that projects get stuck in pilot mode (Andreassen et al., 2015). Andreassen et al. described this as a phenomenon that occurs when projects remain projects and never graduate to full-scale implementation, failing to achieve routinization in daily operations. Wyatt and Sullivan (2005) have referred to this as a plague of pilots. As it relates to health care project management, Urueña, Hidalgo, and Arenas (2016) suggested that pilotism applies to EHR projects. EHR projects are

complex, long, and slow (Urueña et al., 2016). There is also a growing concern regarding pilotism in telemedicine projects (Andreassen et al., 2015; Stokke, 2016).

Andreassen et al. (2015) sought to explore why pilotism thrives in health care. One explanation is because temporary projects afford managerial benefits. For example, Andreassen et al. (2015) explained that projects are methods to allocate resources for innovation work, often challenging the status quo associated with traditional and rigid funding methods. Though Andreassen et al. outlined the administrative rationale for project pilots, often, project leaders undertake pilots to validate projects (Oostveen et al., 2016), which if successful, is a way to manage stakeholders (Oostveen et al., 2016). When pilotism occurs too frequently, it may indicate a broader problem than failing to operationalize projects full-scale (Andreassen et al., 2015). Rather, this may reflect immature environmental conditions in which health care projects navigate (Urueña et al., 2016).

Emphasis on project execution. In the previous section, I outlined the pilotism phenomenon, where projects get stuck in a perpetual state of pilots. In direct contrast, health care projects are also characterized by an over emphasis on project execution. The dichotomy between pilotism and emphasis on project execution exists because of the competing forces of stakeholder management and clinical quality excellence (Arment et al., 2014; Skoien et al., 2016). While project leaders may be hesitant to implement projects full-scale because of certain stakeholders—health care providers (Garg & Agarwal, 2014; Oostveen, 2016), health care professionals also desire to move toward clinical quality improvements as quickly as possible to help other stakeholders—patients.

Implementation of some health care projects could save lives, prevent injury, or have other tangible patient safety and well-being outcomes (Crema & Verbano, 2016; Escobar-Rodríguez & Romero-Alonso, 2014; Guédon et al., 2015). Health care projects also increase efficiency, enhance core business functions, and reduce unnecessary costs, which ultimately benefit patients (Arment et al., 2014; Guédon et al., 2015; McMullen et al., 2015; Skoien et al., 2016). Reed and Card (2016), however, cautioned that the consequences of a do, do, do culture is that projects are not managed in a disciplined, organized, or optimal manner.

Curatolo, Lamouri, Huet, and Rieutord's (2014) findings support Reed and Card's (2016) concern regarding a do, do, do culture. Curatolo et al. found the literature summarizing Lean implementations in hospitals ($n=13$) focused on project execution activities versus project management activities. Curatolo et al. evaluated the literature against various project activity categories, which included (a) understand the environment, (b) select a process to improve, (c) establish support and commitment from top management, (d) organize a project team, (e) understand the process, (f) measure, (g) analyze, (h) improve, (i) manage change, (j) implement, and (k) monitor. Of these, measure, analyze, and improve relate with project execution activities versus project planning (precedes project execution) or project monitoring/closing (which follows project execution) (Curatolo et al., 2014). The concepts of analyze and improve were mentioned in all 13 literature examples, whereas activity categories such as understand the environment and manage change were only mentioned in eight articles; establish

support and commitment from top management and understand the process were cited in nine (Curatolo et al., 2014).

Best Practices in Project Management

Bresnan (2016) argued that the discipline of project management is constantly changing. However, the literature outlines project management best practices, which I organized into four categories: (a) governance, (b) infrastructure, (c) organizational framework, and (d) project leaders.

Governance. Volden and Samset (2017) defined governance as processes, systems, and regulations that ensure project success. There are multiple dimensions to governance structures. The first is governance in the context of the organizational structures within which projects operate. Bekker (2014) identified three organizational models: (a) single-firm, (b) multifirm, and (c) large capital. The single-firm view relates to governance limited to intrafirm projects (Bekker, 2014). Bekker argued that governance in this single-firm perspective is top-down, and focused on meeting the strategic and technical needs of the firm. The multifirm view is associated with projects that involve different organizations (Bekker, 2014). Ke, Cui, Govindan, and Zavadskas (2015) described governance in these cases as formal structures, where the governance framework is contractually binding. In other words, the contract serves as both a legal document and the governance mechanism. Bekker added that contracts clarify mutual interests of the firm, and therefore address both firms' strategic and technical needs. In the large capital governance model, leaders from different entities form a temporary organization that provides the governance framework (Bekker, 2014). This model

outlines strategic and institutional needs of the firm, taking into consideration external environmental factors such as political, environmental, and statutory requirements (Bekker, 2014).

The second is governance from the project perspective, described as a bottom-up approach (Bekker, 2015). Bekker (2015) explained that a project-based governance model requires leaders to limit their involvement to macrolevel issues that are truly governance-related and not the management and control aspects. For example, Bekker stated that ensuring alignment between project and corporate governance functions is a legitimate governance-related issue. Alignment is essential because it minimizes shortages of critical resources on low-priority initiatives, optimizes organizational investments, and therefore increases the likelihood of projects to contribute to organizational success (Koh & Crawford, 2013). Van der Hoorn and Whitty (2017) suggested that vision setting and appealing to team members' sense of a higher good leads to alignment. To summarize, Bekker suggested that a governance framework based on the project perspective should provide mechanisms to guide project success versus top leaders micromanaging projects.

Joslin and Müller (2016) agreed with Bekker (2015) that an appropriate governance structure should focus on processes, and not on control nor outcomes measures. Joslin and Müller elaborated by contrasting a control-oriented structure (focused on increasing shareholder wealth) versus a stakeholder-oriented model (focused on prioritizing stakeholder impact). Joslin and Müller suggested that a stakeholder-oriented governance model exists to influence behaviors, such as peoples' ability to

follow processes, and correlates to project success. Joslin and Müller's conclusions mirror Bekker's suggestions about limiting the role of governance to developing overarching strategic mechanisms for project success, and not the control-oriented tactics.

To elaborate further on developing these overarching mechanisms, Bekker (2015) advised top leaders to consider outlining practical process guidelines to help project teams achieve success. For example, Bekker suggested that leaders develop criteria for project steering committee selection and conduct. Rather than control what type of projects leaders select, this recommendation seeks to address the who and how. Additionally, Zwikael and Smyrk (2015) suggested incorporating benefit realization accountability. Governance structures that incorporate accountability mechanisms positively influence project performance (Zwikael & Smyrk, 2015). Zwikael and Smyrk offered several ways of incorporating accountability mechanisms: (a) project owners should serve as an agent of the project sponsor, (b) the project owner should chair the project steering committee, and (c) the project manager should be accountable to the project owner. All of these recommendations demonstrate the importance of selecting the right governance models to ensure project success.

Infrastructure. Leaders have a responsibility to create an infrastructure that ensures project success. Leaders provide these through their decision-making authority and power to allocate resources (Hermano & Martín-Cruz, 2016).

Project support offices and systems. According to Wysocki (2014), PSOs should exist to support and mentor project teams. Widforss and Rosqvist (2015) concurred, indicating that PSOs should serve as internal consultants to project teams. Specific

examples of serving in a consultancy role include (a) coordinating activities that promote project generation, (b) assisting with project budgeting and funding, (c) creating project tools, (d) preparing agreements, (e) developing quality assurance methods, (f) offering communication and legal advice, and (g) in some cases offer project management certification (Widforss & Rosqvist, 2015). In summary, PSOs provide project management resources (Wysocki, 2014).

Beyond the functions of PSOs or the resources they provide, Wysocki (2014) explained that PSO structures vary. They can be virtual or real (physical office), temporary or permanent (Wysocki, 2014). Additionally, depending on the environments in which PSOs operate, there could be one central PSO or multiple PSOs operating concurrently with different structures, mission, services, and functions. Müller, Glückler, and Aubry (2013) found that in multiple PSO environments, PSOs fell into one of three typologies: (a) serving, (b) controlling, and (c) partnering. The differentiating factor among the three typologies is the nature of the relationship among the PSOs as well as the roles they undertake within the organization (Müller et al., 2013).

Wysocki (2014) described five levels of PSO maturity and growth, based on (a) how refined PSO processes are, (b) type of support the PSO provides, and (c) training provided by the PSO. Wysocki outlined that the higher the PSO maturity level, the more advanced and integrated the characteristics of the PSO become (see Table 3). Khalema, Van Waveren, and Chan (2015) concurred with the five levels, but named the levels (in ascending order) (a) No PMO (Ad hoc), (b) Mobilize, (c) Design, (d) Implement, and (e) Manage. Khalema et al. also added additional characteristics beyond Wysocki's (2014)

three listed in Table 3, to include things such as PSO governance framework and PSO interaction with the broader organization. Khalema et al. concluded that PSO maturity, and not the mere presence of a PSO is what adds organizational value. Specifically, operational, tactical, and strategic maturity of the PSO correlated positively with organization project management maturity (Khalema et al., 2015).

Table 3

Wysocki's (2014) PSO Maturity and Growth Levels

	Level 1	Level 2	Level 3	Level 4	Level 5
Processes	None	Defined	Defined and integrated	Portfolio management	Continuous improvement of all PSO functions
Support	Ad hoc support	Reactive support	Proactive support	Infrastructure aligned with business strategy	
Training	None	Introductory	More training	Extensive	

Infrastructure is not limited to PSOs. Organizations may use human resource and knowledge management systems, collectively referred to as PMCR (Ekrot, Kock, & Gemünden, 2016). PMCRs are systems designed to support project management (Ekrot et al., 2016). Chang (2017) referred to these generically as resource planning systems. Resource planning systems help project managers coordinate and share project resources versus competing for them (Chang, 2017). Knowledge is a resource and relates directly with project lessons learned, a project management best practice (Hessler, 2016). Hessler (2016) explained that through a formalized lessons learned process, project teams were able to consider potential project issues and reinvent their project management plans

around addressing them. For project-oriented firms, PMCR affected average project success, as well as overall business success (Ekrot et al., 2016). Bharadwaj, Chauhan, and Raman (2013) supported Ekrot et al.'s findings and found that knowledge management infrastructure, such as PMCR lead to knowledge management effectiveness.

Besides PMCR, there are other information systems, such as enterprise risk management (ERM) systems to manage project risk (Khameneh, Taheri, & Ershadi, 2016; Thamhain, 2013). Khameneh et al. (2016) explained that ERM provides a comprehensive analysis of organizational risks using an integrated and coordinated approach, which systematically evaluates all types, nature, and outcomes of risks. Liu, Zou, and Gong (2013) and Doskočil (2016) discussed the importance of ERM on project risk management (PRM). PRM is risk specific to individual projects but constitutes many of the same risk management concepts of ERM (Liu et al., 2013). Thamhain (2013) argued that most project risks are enterprise-level issues, not factors internal to the project itself. Fabricius and Büttgen (2015) posited that integration of ERM and PRM is important in overcoming project managers' inaccurate risk assessments at the project-level. Yu et al. (2017) indicated that comprehensive risk evaluation also includes examining risks in the context of stakeholders. An ERM infrastructure may yield tangible benefits such as (a) minimized project cost increases, (b) limited project costs, or (c) reduced project costs (Allen, Carpenter, Hutchins, & Jones, 2015).

Incentives. Hutchinson-Krupat and Chao (2014) indicated that proper incentives promote collaborative innovation. When dealing with projects involving subcontractors, Yang, Zhao, and Lan (2015) concluded that incentive-based contracts also yielded

favorable results. Hutchinson-Krupat and Chao found that participants were willing to give up larger proportions of their experimental resources when the experimental financial incentives were greater; the opposite held true as well. Similarly, Yang et al. found that subcontractors met project deadlines and accomplished project tasks more reliably when incentives were greater. Additionally, Hutchinson-Krupat and Chao found that participants were less likely to allocate their experimental resources when they incurred experimental costs. Hutchinson-Krupat and Chao also concluded that the effect of financial rewards varied depending on whether penalties were high or low. For example, when penalties were low, rewards were less impactful (Hutchinson-Krupat & Chao, 2014). Therefore, leaders must understand how to structure penalties and rewards to maximize project success (Hutchinson-Krupat & Chao, 2014; Yang et al., 2015).

For example, Lai, Wu, Shi, Wang, and Kong (2015) hypothesized a model where a combination of various incentives (explicit and implicit, short- and long-term) promoted trust among project-based supply chain partners. Specifically, Lai et al. found that an incentive strategy based on firm reputation (as a proxy for firm product quality) would yield project value and improvement in net earnings. However, when incentives are not properly set, leaders must address the resulting issues. Allen, Herring, Moody, and Williams (2015) studied cases involving project procurement incentives, and found that setting short- and long-term goals can correct for under or over incentivizing suppliers (Allen et al., 2015). These are all considerations that leaders should consider when trying to support project management success.

Organizational framework. There are several best practices associated with organizational framework. In the following, I described three categories: (a) corporate culture, (b) communication, and (c) project cultural diversity management.

Corporate culture. Leaders play a major role in establishing organizational culture, and culture is critical to project success (Hermano & Martín-Cruz, 2016; Zuo et al., 2014). For example, Liu et al. (2013) found that a corporate culture supportive of ERM had more successful PRM. Hutchinson-Krupat and Chao (2014) found that when the organizational culture was more accepting of failure, participants took more risk, which led to greater levels of innovation. Biedenbach and Müller (2012) also concluded that an innovative culture was associated with long-term project success. Corporate culture can also extend to include stakeholders along the value chain, creating a broader culture that may further compound project success (Zuo et al., 2014).

Corporate culture does not materialize from nothing, but rather leaders cultivate it. Leaders are also responsible for facilitating change or actively manage their corporate culture to realize its benefits. For example, Rhodes and Dawson (2013) found that integrating a lessons learned process within the organization so that the lessons learned were accessible and valuable required behavioral and cultural changes. These changes needed leader support and advocacy. Karol (2015) argued that an environment that encourages innovation and engenders trust is necessary. Several researchers (Grant, 2016; Molineux, 2013) also warned that culture change is difficult and takes time. Additionally, leaders need to pay attention to the processes used to change culture (Dowling & Moran, 2012; Grant, 2016). For example, cultural changes that are strategy-

based and integrated into core operations (built-in) will create a sustainable corporate reputation (Dowling & Moran, 2012). Conversely, cultural changes treated as initiatives or designed around tactics (bolted-on) are disingenuous and perhaps, at their worst, incompatible with business objectives (Dowling & Moran, 2012).

Built-in cultural changes reorient the organization based on common understanding, shared purpose, and maximize stakeholder value (Chatman, 2014; Dowling & Moran, 2012). Trompenaars and Hampden-Turner (2012) pointed to three imperatives of cultural change: (a) awareness of cultural differences, (b) respect for cultural differences, and (c) reconciliation of cultural differences. Related to both awareness and respect for cultural differences, Grant (2016) proposed giving employees the latitude to think innovatively, and as individuals. Giving employees autonomy and the opportunity to think innovatively promotes a balance between cohesion and dissent and undergirds a strong culture (Grant, 2016). Nissen (2014) described reconciliation as a process in which strengths of different perspectives are brought together in order to make the whole greater than its independent parts. Leaders can achieve cohesion among different cultures by providing appropriate internal support mechanisms (Dowling & Moran, 2012). Harrington and Frank (2015) proposed that changes require a shift in focus from projects and programs to organizational operations. Harrington and Frank's (2015) ideas are related to Joslin and Müller (2016) and Bekker's (2015) emphasis on behaviors and processes, rather than a control orientation. In other words, the greatest effect on an organization's ability to achieve change lies with how leaders manage the organization (Harrington & Frank, 2015).

Communication. Burga and Rezania (2017) posited that project success hinges on project accountability, and project accountability on effective social interaction. There is no one-size fits all framework to govern how and where communication should occur (Foss, Frederiksen, & Rullani, 2016). Depending on stakeholders involved, their communication preferences, the urgency of the content, and availability of resources, multiple communication options exist (Jerbrant & Gustavsson, 2013). For example, teams can use face-to-face discussions, telephone, email, as well as formal presentations (Jerbrant & Gustavsson, 2013; Stanciu, Condrea, & Zamfir, 2016). Similarly, communication occurs in varied locations, for example, in hallways, break rooms, official meeting spaces, and technology-based environments like corporate intranets (Jerbrant & Gustavsson, 2013). Foss et al. (2016) argued that communication also occurs in both structured and unstructured environments. Unstructured environments are more conducive to communication related to new projects or project launches, where structured spaces are more relevant for project joining purposes (Foss, 2016). In the literature, I found two strategies as examples of communication best practices. The first is cross-functional communication, which is a macrolevel strategy, while the second is a specific tool called conversational guides, a microproject-level communication strategy.

Cross-functional communication is an enterprise-wide conceptual framework characterized by a highly collaborative environment among all enterprise functions. Several authors (Stanciu et al., 2016; Thamhain, 2013) indicated that communication is the lynchpin for project success and that all constituents from the organization, but especially management, should participate. Through collaboration and ongoing dialogue,

stakeholders are kept abreast of salient issues (Stanciu et al., 2016; Thamhain, 2013). Thamhain (2013) argued that a cross-functional communication framework also serves as an early risk identification system. On a more specific project level, Mastrogiacomo, Missonier, and Bonazzi (2014) proposed using conversational guides to improve the quality of real-time project coordination. These guides included a structured approach to communication, covering concepts such as (a) joint objectives, (b) joint commitments, (c) joint resources, and (d) joint risks (Mastrogiacomo et al., 2014). Mastrogiacomo et al.'s finding regarding the need to communicate about joint resources relates to Chang's (2017) ideas that resource planning systems are necessary to coordinate and share project resources. In other words, resource-planning systems become communication mechanisms (Chang, 2017). Mastrogiacomo et al. found that this structured approach to communication resulted in (a) fewer unfavorable surprises, (b) increased early detection of potential project failures, and (c) helped strengthen peoples' commitment to the project by emphasizing the alignment of each parties' purpose to the overall organizational strategy. Cheung, Yiu, and Lam (2013) concurred on Mastrogiacomo et al.'s last point, citing that trust affects communication, thereby influencing project performance. Therefore, using tools such as structured conversational guides may be a communication best practice.

Although no panacea for project communication exists, leaders should understand the critical role communication plays in ensuring alignment (Cheung et al., 2013; Mastrogiacomo et al.; Stanciu et al., 2016; Thamhain, 2013). Given the availability of different types of communication methods and the flexibility of where communication

can occur, leaders should consider deliberate communication strategies as part of their project strategy. Furthermore, Senescu, Aranda-Mena, and Haymaker (2013) determined that a direct relationship exists between project complexity and communication challenges. This means that as project complexity increases, communication challenges rise as well (Senescu et al., 2013). Leaders need to understand this relationship and adjust resources and infrastructure accordingly (Senescu et al., 2013).

Project cultural diversity management. Project teams are becoming geographically diverse, spread across time zones and cultures (Olaniran, 2017). Böhm (2013) reported that the project management literature is replete with guidelines to overcome superficial cross-cultural issues such as geographical boundaries, time zones, and varying regulations and laws, but absent of best practices in dealing with intercultural team dynamics. Böhm encouraged project managers to understand the cultural diversity of individuals because an overly simplistic viewpoint of culture, limited to national citizenships, could lead to stereotypes. Trompenaars and Hampden-Turner (2012) agreed, stating that cultural norms do not govern all individuals' behaviors equally. Project leaders must always account for individuals' personalities and their work experiences as part of project cultural diversity management (Böhm, 2013).

Cultural diversity affects projects in four ways. First, leveraging cultural diversity results in greater knowledge sharing within and among project teams (Ekrot et al., 2013; Bharadwaj et al., 2013; Hessler, 2016; Jensen, 2015). Jensen (2015) referred to knowledge sharing as building social capital, a concept that relates to Trompenaars and Hampden-Turner's (2012) definition of particularism, or relationships among people.

Tabassi, Roufechaei, Bakar, and Yusof (2017) described building social capital as team condition, factors that contribute to a highly effective team. Tabassi et al. (2017) showed that team condition has significant direct and indirect impacts on team performance and therefore project success. Although, there are researchers who disagree; Buvlik and Tvedt (2017) found that team members' commitment to projects is more important for knowledge sharing than social capital or team commitment. Second, leveraging cultural diversity may result in projects that more innovative (Jensen, 2015; Mossolly, 2015; Trompenaars & Hampden-Turner, 2012). Third, project managers have the potential to improve their products' time to market (Jensen, 2015). Finally, cultural diversity results in enhanced local presence and collaboration, yielding projects more responsive to local markets, and therefore contributes to organizational success (Jensen, 2015; Mossolly, 2015).

Project cultural diversity management is a project management best practice for two reasons. First, many researchers (Böhm, 2013; Jensen, 2015; Mossolly, 2015; Popescu, Borca, Fisis, & Draghici, 2014) identified that projects are becoming increasingly global. This indicates the ongoing need to coordinate people with diverse cultural backgrounds toward common goals. To be successful in the international market, leaders must understand how to leverage cultural diversity. Cultural diversity awareness can minimize culture-based misunderstandings and disputes, and enhance acceptance and respect in business transactions (Böhm, 2013). Maon and Lindgreen (2015) recommended that business leaders treat cultures as stakeholders, and not just operational variables.

Second, Trompenaars and Hampden-Turner (2012) argued that securing the long-term success of the organization predicated on managing cultural diversity. Nissen (2014) proposed that cultures share common problems and that leaders should leverage differences in cultures to find innovative solutions to those problems. Leaders who create synergy between unique cultural perspectives may realize business benefits and value (Jensen; 2015; Mossolly, 2015; Nissen, 2014; Trompenaars & Hampden-Turner, 2012). Chatman (2014) agreed and explained that culture defines a future vision for organizational success. Therefore, culture becomes synonymous with business strategy (Chatman, 2014).

Project leaders. Though there are a variety of factors that influence project success, one consistent theme in the literature is the role leaders play (Boonstra, 2013; Maqbool et al., 2017; Meng & Boyd, 2017). Hermano and Martín-Cruz (2016) explained that top leaders' ability to influence project success translated to overall firm performance. This correlation existed regardless of firms' characteristics, such as the firms' industry, size, years in business, or their orientation toward projects (project-based or not) (Hermano & Martín-Cruz, 2016). Unger et al. (2015) agreed, and more specifically defined top leaders' (positive) influence as a marker of management quality. In the following section, I described leaders' personal characteristics as well as their project management capabilities in defining this best practice category.

Leader personal characteristics. Aronson et al. (2013) found that among several factors, leaders' vision, values, performance, and ability to drive project spirit explained some variance in project success. Karol (2015) and Miller, Balapurria, and Mohamed-

Sesay (2015) concurred with leaders' role in setting vision. Karol specifically described the importance of leaders' ability to align projects with corporate vision and business goals. Stoffers and Mordant-Dols (2015) suggested that leaders who role model behaviors have positive influence on their employees, specifically for projects involving change management. The latter may serve as an example of leader values. Performance may correlate to management quality, as described previously by Unger et al. (2015). Aronson et al. defined spirit as emotions, attitudes, and norms that compel people to action. Related to Aronson et al.'s concept of project spirit, Hassan, Bashir, and Abbas (2017) found that extraversion, agreeableness, and openness to experience were direct positive indicators of project success.

It may be difficult to exude project spirit if leaders are not attentive to projects. Therefore, a second best practice in the area of leader characteristics is leader attention. For example, Hessler (2016) found that in some industries, top leaders largely ignore project management capabilities of teams working on smaller scale projects (ranging from \$25-\$250 million). If leaders ignore the need to enhance operational capabilities of project teams, the result is more failed projects (Hessler, 2016). Iacob (2013) described leader attention as leaders' project engagement. One way leaders engage with projects or project teams is by actively promoting projects under their purview (Iacob, 2013). Meng and Boyd (2017) concurred from the perspective that leaders need to value project teams and working relationships.

Finally, several researchers linked leader qualities with greater levels of project success (Maqbool et al., 2017; Miller et al., 2015; Samset & Volden, 2016; Unger et al.

(2015). For example, Unger et al. (2015) posited that proactive leaders have better project success rates. An example of being proactive is when leaders conduct front-end assessment of projects (Samset & Volden, 2016). Samset and Volden (2016) argued that these assessments help leaders forecast the potential for project success. If leaders determine that projects have lower probabilities of success, they can discontinue those projects and minimize sunk costs (Samset & Volden, 2016). Miller et al. (2015) provided a different example of what leaders can do to be proactive on the front-end. Miller et al. suggested that leaders should establish effective project teams, selecting members who can manage conflict in productive ways. Teams comprised of people who think the same may have too much agreement and stifle project success (Miller et al., 2015). Finally, Maqbool et al. (2017) found that leaders with higher emotional intelligence quotients were more effective and therefore experienced higher project success rates.

Project management capabilities. Joslin and Müller (2015) indicated a difference between project success and project management success and that project management methodology (PMM) explained 22.3% of the variation in project success. Therefore, when project leaders' use of PMM is incomplete or limited, project efficiency, quality, and the probability of project success diminishes (Joslin & Müller, 2015). Furthermore, Badewi and Shehab (2016) found that an organization's use of PMM affects project success from an investment standpoint. Badewi and Shehab also found that organizations with both project and benefits management frameworks were more successful than those that did not have these infrastructure components. This underscores the importance of applying PMM not merely possessing them (Joslin & Müller, 2015).

This relates to Khalema et al.'s (2015) conclusion that PSO maturity, and not the mere presence of a PSO is what mattered.

Similarly, Mathur, Jugdev, and Fung (2014) found that leaders who supported project management processes experienced project and firm level success. Specifically, project management integration was a strong significant predictor of both project and firm performance (Mathur et al., 2014). Mathur et al.'s findings relate to van der Hoorn and Whitty's (2017) discussion regarding the importance of alignment when managing projects. Similarly, multiple authors (Hyväri, 2016; Sánchez & Schneider, 2014; Serra & Kunc, 2015) indicated that projects are an important component to realizing corporate strategy and contribute to overall firm performance. Several researchers (Chang, 2017; Maqbool et al., 2017; Mathur et al., 2014) also suggested that project management assets, such as project management knowledge, contribute to project and firm level success. Combined, these project management capabilities and assets contribute to a firm's competitive advantage.

Summary of the Literature Review

Projects serve a variety of purposes, and I outlined four in this literature review. The first is that projects are a component of business operations, creating business value (Valčić et al., 2016). The second is that projects are effective in implementing corporate strategy (Hyväri, 2016; Sánchez & Schneider, 2014; Serra & Kunc, 2015). The third is that projects help promote business transformation (Hyväri, 2016). Finally, Koh and Crawford (2013) suggested that projects serve as catalysts for new strategy development.

Though projects are important to business success, many projects fail. There were three broad categories of causes for failure: (a) people issues, (b) process issues, and (c) project issues. People issues spanned from top level leadership (Albliwi et al., 2014), to teams (Dwivedi et al., 2015), and to individuals (Anthopoulos et al., 2016). Process issues included approaches from throughout the project life cycle, from project selection and prioritization (Albliwi et al., 2014) all the way to accountability mechanisms at the end of projects (Hjelmbrekke et al., 2015). Project related issues as discussed in this literature review stemmed from complexity variables. These variables related to internal project composition, logistical issues, and macro external environmental factors.

While enhancing the quality of services delivered, implementing software, tools, and resources are common in other industries, projects executed in the health care setting have some unique characteristics. The three I described included (a) prioritization of stakeholder management, (b) pilotism, and (c) an emphasis on project execution. I focused a majority of the literature review on project management best practices, as the research question is what strategies leaders use to manage projects successfully in health care. I organized other authors' findings into the following four categories (a) governance, (b) infrastructure, (c) organizational framework, and (d) project leaders. The most appropriate governance structure should focus on processes, and not on control nor outcome measures (Bekker, 2015; Joslin & Müller, 2016). Successful project management also requires proper infrastructure—such as PSOs, systems to help manage human resources, knowledge, lessons learned, risk, proper incentives, and others. An organizational framework conducive to project success includes an awareness of (a)

corporate culture, (b) communication, and (c) project cultural diversity management. Finally, project leaders' personal characteristics are important to project success. Project manager characteristics include a variety of factors including their dispositions, for example, their ability to drive project spirit (Aronson et al., 2013), vision setting (Karol, 2015; Miller et al., 2015), attentiveness (Hessler, 2016), engagement (Iacob, 2013), proactiveness (Unger et al., 2015), and others. Similarly, leaders' project management capabilities are also important (Mathur et al., 2014).

Transition

In Section 1, I outlined why the topic of project management strategies in health care is a relevant business topic with brief explanations of the background, problem and purpose statements, as well as the nature of the study. Additionally, in this section, I defined the research question, interview questions, conceptual framework, operational definitions, assumptions, limitations, and delimitations, as well as the significance of the study. Section 1 also consisted of a literature review, which I organized into five main themes: (a) contingency theory, (b) importance of projects and project management, (c) why projects fail, (d) unique characteristics of project management in health care, and (e) best practices in project management.

In Section 2, I outline the role of the researcher and provide a more detailed explanation of the project components, as well as the rationale for the decisions I made. For example, I describe inclusion criteria for participants, chosen research method and design, how I defined the population and achieved my study sample. I also explain my data collection instruments and techniques, data organization and analysis, as well as

methods I used to achieve trustworthiness as defined by dependability, credibility, confirmability, and transferability.

In Section 3, I describe the outcomes of the project, including a presentation of the findings, application to professional practice, implications for social change, recommendations for action, and recommendations for further research. Finally, I provide reflections and conclusions regarding project management strategies in health care.

Section 2: The Project

The goal of this qualitative single case study was to explore strategies that leaders use to manage projects successfully in health care. In this section, I outline the purpose of this study, the researcher's role in a qualitative case study, the participants anticipated in contributing to this study, as well as my research method and design. I discuss my population and sampling techniques and how data saturation was achieved. Similarly, I describe how I conducted my study ethically, describing my data collection, organization, and analysis techniques. Finally, I review methods to ensure the validity and reliability of my findings.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies that leaders use to manage projects successfully in health care. The population consisted of project leaders at a health care organization located in Pennsylvania, who successfully complete projects on a routine basis. Successful projects are ones that finish on time and on budget and that meet the requirements listed in the project charter.

This study might contribute to positive social change if health care leaders can use the information to enhance organizational performance. The success of health care organizations directly influences their ability to uphold their mission statements. Health care facilities exist to serve individuals and communities. Therefore, enhancing their performance has a cascading positive effect on society. When health care organizations are successful, the leaders of those organizations can ensure that important health and wellness services are provided and available to those who need them. Additionally,

leaders of successful health care organizations can fund performance improvement initiatives, support quality programs, and offer innovative services to individuals and communities to increase health outcomes.

Role of the Researcher

Researchers have the responsibility to uphold ethical practices when conducting research (McDermid, Peters, Jackson, & Daly, 2014). Because this study involved human subjects (interviewees), it was important to evaluate the three principles outlined in the Belmont Report pertaining to ethical research: (a) respect for persons, (b) beneficence, and (c) justice. Researchers should respect the autonomy of research participants in order to uphold the principle of respect for persons (Adams & Miles, 2013; Drake & Yu, 2016). Second, researchers should do no harm, maximize possible benefits from the study, and minimize possible harms to uphold the beneficence principle (Cseko & Tremaine, 2013; Drake & Yu, 2016). Finally, researchers ought to treat participants equally to uphold the principle of justice (Drake & Yu, 2016). For this study, I used several strategies to fulfill my responsibilities as a researcher: (a) disclosed my prior employment history with the organization under study, (b) examined the study protocol, (c) chose and treat participants fairly, (d) used an informed consent, (e) developed an interview protocol, (f) constructed interview questions carefully, and (g) performed member checks.

First, because researchers serve as the primary data collection instrument (Chan, Fung, & Chien, 2013), it was important to identify potential biases. These biases, if not accounted for, may cloud judgment, understanding, or interpretation during data

collection and analysis. While eliminating all biases is not possible, it was necessary to mitigate researcher bias. To accomplish this, I examined and identified my personal lens, including the experiences, values, and other ideologies that may influence this study. Being cognizant of personal biases can be the first proactive step to avoiding them.

I have biases related to my personal experience working in project management. As a member of a senior operations team within a health system, I have managed several projects, including those related to annual goal setting, annual operational budget preparation, workforce downsizing, implementation of an operational and financial benchmarking application, and conversion to electronic health records. Based on these professional experiences, there was a risk of identifying with the participants' experiences, and potentially interjecting personal feelings or prejudices. From a value and ideological perspective, my educational and professional backgrounds are in managerial economics and health care administration. My educational and professional backgrounds make me partial to concepts of efficiency, productivity, and cost-effectiveness. While these are necessary for project management, there are other important nonquantifiable aspects such as stakeholder and human resource management. The risk is that I might minimize or inadvertently fail to identify these as relevant and critical to understanding the research problem. Finally, I worked for the organization under study from 2007 to 2011 as a member of management. There was potential for me to recognize participants or to have had professional relationships with them in the past. However, since I have not worked for the organization for 6 years, there

were no conflicts of interest, nor any undue influences related to my previous employment.

Second, I ensured a thorough research proposal. Yongjie, Mikton, Wilder, and Gassoumis (2016) argued that researchers must outline their methods comprehensively in a study protocol for research to be rigorous. Health and Human Services (2016) also indicated that researchers should assess the risks and benefits of the study by examining the study protocol. I outlined a detailed study protocol in Section 2 regarding how this study would be conducted. Furthermore, my committee chair and other university representatives, as well as the Institutional Review Board (IRB) validated my proposal.

Third, I chose and treated participants fairly. This follows the recommendation of Health and Human Services (2016). For example, I did not select any vulnerable populations to participate, nor did my selection of participants provide benefits unequally or pose risks to any class or segment of the population. This study dealt with health care project leaders; therefore, the selection of participants was limited to employees' job functions and roles, not based on any social, cultural, economic, or political classes.

Fourth, I used an informed consent. Researchers should use an informed consent process to ensure their participants' rights to autonomy (Grady, 2015; Health and Human Services, 2016). Fifth, I developed an interview protocol. Peters and Halcomb (2015) recommended the use of interview protocols to standardize the content and format of interviews. Similarly, Benia, Hauck-Filho, Dillenburg, and Stein (2015) indicated that a consistent approach helps minimize variation during interviews, and therefore reduces the tendency for researchers to introduce bias, which could occur by the manner in which

questions are phrased or presented. The sixth strategy to uphold my responsibility for conducting ethical research was to evaluate interview questions carefully. Yin (2014) posited that *why* questions may elicit emotional reactions such as defensiveness; therefore, researchers should consider alternative phrasing. In following Yin's (2014) recommendation, my interview questions consisted of *what* or *how* questions, and I avoided *why* questions.

Finally, I performed member checks. Member checking is a method to ensure research quality and reliability by engaging the participant in reviewing the researchers' work (Harvey, 2015; Lincoln, Guba, & Pilotta, 1985; Morse, 2015). Carrington, Neville, and Whitwell (2014) concluded that member checking is useful for checking researchers' interpretations of data.

Participants

Yin (2013) indicated that qualitative researchers must choose study participants that will help them answer their research question. Because I hoped to study strategies that health care project leaders use to manage projects successfully, it was critical to include individuals who have led successful projects in health care. In doing so, my sampling technique was purposive in nature. A purposive approach is one where researchers identify selection criteria and apply them to find suitable cases to study (Chandani, Duffy, Lamphere, Noel, Heaton, & Andersson, 2016).

The first eligibility criterion was that participants had to be adults 18 years of age or older and employed by the organization under study; participants may have had any length of service. Second, participants must have served in a project leader capacity

within the last 5 years. This did not require individuals to have held a position with a title including the words *project manager*. Any employee who had as part of their job function, responsibility, or role to manage projects was eligible. Similarly, participants could possess varied degrees of experience pertaining to project management. Third, project leaders must have led projects that were deemed successful by executive management. Individuals who did not meet the inclusion criteria were excluded from the study. Yin (2014) indicated that a case study could comprise a minimum of three and up to eight individuals. I followed this recommendation.

I worked for the organization under study from 2007 to 2011 as a member of management. Because of my previous employment with the organization under study, I maintained some professional relationships with select individuals throughout the organization. Maintaining professional connections may be an advantage because there is previously established trust, credibility, and a shared history. The importance of a shared history aligns with the findings of Valentine, Nam, Hollingsworth, and Hall (2014), who found that trust is important to researchers' work. Through this trust, I hoped to gain access to a list of eligible project leaders by contacting the chief executive officer from the organization of interest. I explained the present study and solicited her assistance in identifying project leaders she believed met the inclusion criteria. I also gained her support in allowing me access to relevant project documents and having participants contribute to the study through interviews. There was potential for me to recognize participants or to have had professional relationships with them in the past. However,

since I have not worked for the organization for 6 years, there were no conflicts of interest, nor any undue influences related to my previous employment.

Research Method and Design

There are three central research methods (Palinkas et al., 2015) and multiple designs for each method. Common qualitative research designs include case study, phenomenology, narrative, and ethnography (Bradbury-Jones et al., 2017). The quantitative method has several design categories such as experimental, quasiexperimental, and nonexperimental, each with more specific designs (Yoshikawa, Weisner, Kalil, & Way, 2013). The last methodological category is mixed methods, a confluence of both qualitative and quantitative methods (Bromwich & Scapens, 2016; Guetterman, Fetters, & Creswell, 2015). It is the researchers' responsibility to select the method and design most appropriate for their study.

Research Method

The research question for this study was, what strategies leaders use to manage projects successfully in health care? The qualitative method aligns with the purpose of this study. McCusker and Gunaydin (2014) proposed that the qualitative method is appropriate for research questions, which aim to understand what, how, or why. These questions are complex because they are exploratory and not explanatory in nature. Campbell (2014) indicated that the qualitative approach is appropriate when researchers want to focus on using interactive and humanistic methods in collecting open-ended data from a variety of sources. Similarly, qualitative researchers want to see what themes emerge from the data (Campbell, 2014). The qualitative method is important when

participants' accounts of their experiences are contextualized in their original context (Campbell, 2014; Yin, 2014). Context is important because it provides additional information regarding the setting, which is important to study the research question in-depth. In order to understand project management strategies, I (a) asked what or how questions, (b) used interactive methods to collect interview and project document data, and (c) contextualized data within health care.

Based on the previous justification, neither the quantitative nor mixed methods were appropriate for this study. Quantitative methods are better suited for research questions that seek to test hypotheses (Palinkas et al., 2015). Similarly, the quantitative approach is appropriate for researchers (a) seeking to study explanatory research questions such as how many and how much, (b) wanting to quantify their results numerically with precise and objective measurements, and (c) validating their results statistically (Campbell, 2014; McCusker & Gunaydin, 2014). Campbell (2014) also posited that quantitative researchers could generalize their findings or provide explanations regarding causality. The aim of this study was not to test a hypothesis, quantify results numerically, validate results statistically, generalize findings, nor explain causality, making the quantitative approach inappropriate.

The mixed methods approach is an amalgamation of qualitative and quantitative methods and is still a developing methodology (Guetterman et al., 2015). Birchall, Murphy, and Milne (2016) suggested that the mixed methods approach is superior under the right conditions because it is comprehensive, though they acknowledge potential shortcomings in mixing positivism and interpretivism paradigms. The key to successful

mixed methods application is synthesis and integration (Birchall et al., 2016). The mixed methods approach is also useful when one type of data collection technique is insufficient in answering the research question. For example, Heinrich, Uribe, Wübbeler, Hoffmann, and Roes (2016) used a mixed methods approach to collect both qualitative interview and quantitative survey data, while Lehna et al. (2015) collected qualitative interview and quantitative photographic data. The mixed methods approach was not appropriate for my study because I did not plan to collect quantitative data. I collected interview data as well as project documents, both within the qualitative domain.

Research Design

Several characteristics that made case study a suitable design for the present study. Several researchers (Keenan, Teijlingen, & Pitchforth, 2015; Lunnay, Borlagdan, McNaughton, & Ward, 2015) explained that case studies are bound by circumstances and specific situations. This study met this qualification as it was bound to successful projects led by health care project leaders. Case studies focus on contemporary events with a variety of artifacts (Yin, 2014). The research question and the supporting literature were based on contemporary business problems related to project management. To answer my research question, I obtained then analyzed the perspectives of project leaders with a record of successful project management. I also obtained and analyzed project documents, which are artifacts. Case study design is a form of applied research, with the purpose of solving practical problems. Harrington and Frank (2015) reported that project failure and wasted resources are rampant in the field of project management. The purpose of this study was to highlight strategies that project leaders use to manage

projects successfully. The results from this study might help health care organizations address the problem of high project failure rate and wasted resources.

While there are other designs available under the qualitative method, such as phenomenology, narrative, and ethnography, these designs were not well suited for this study. The phenomenological design is applicable when exploring individuals' perceptions and experiences about an event or phenomenon (Conklin, 2013; Finlay & Elander, 2016). Additionally, Sambhava, Nautiyal, and Jain (2016) indicated that phenomenology is important for capturing data related to participants' opinions, ideas, and attitudes. For example, Bawa and Watson (2017) used phenomenology as a way to gain insight into social, cultural, and psychological issues associated with Chinese graduate students writing in English. While Bawa and Watson sought to understand the lived experiences of their participants, this was not the purpose of my proposed study. Rather, the objective of my study was to explore project management strategies, not opinions, ideas, or attitudes regarding strategies. Therefore, the phenomenological approach was not appropriate.

Researchers may consider using the narrative design when their research question is related to specific life stories of research subjects (Jeppesen, 2016). Researchers use storytelling to convey information in narrative studies (Bell, 2017; Callary, 2013). Specifically, narrative studies give readers insight into the life of the individual being studied (Bell, 2017). Bell (2017) argued that the narrative design is highly effective for marginalized groups of people. Callary (2013) cautioned researchers to be vigilant in maintaining research ethics when using the narrative approach. Callary argued that the

data researchers collect is very intimate and can be sensitive to participants, for example, personal journals. My research question was not about participants' life stories, nor was it relevant to collect personally sensitive information from my participants. Therefore, the narrative design was not appropriate for my study.

Researchers who use the ethnographic approach immerse themselves into a community of interest to understand systems of people within their cultural contexts better (Sarmiento, Gysels, Higginson, & Gomes, 2017). Additionally, Graneheim, Johansson, and Lindgren (2014) explained that ethnographic researchers might want to collect primary observations of individuals' behaviors within their communities. For this study, it was not necessary to immerse myself in the health system organization to answer my research question. I was not interested in observing participants and their behaviors within their community. Therefore, ethnography was not appropriate for this study.

Finally, in a qualitative case study, it is important for researchers to achieve data saturation. Data saturation occurs when no new information is uncovered (Colombo, Froning, García, & Vandelli, 2016). However, data saturation cannot be defined explicitly by the number of interviewees (Fusch & Ness, 2015). Rather, researchers must evaluate data saturation on a case-by-case basis (Fusch & Ness, 2015). For example, Gibbins, Bhatia, Forbes, and Reid (2014) achieved data saturation after eight interviews.

Because depth of information is important when conducting a case study, I took my time interviewing all participants to allow them sufficient opportunity to detail their perspectives. In this way, I followed the recommendation of several researchers (Cornelissen, 2016; Fusch & Ness, 2015) who indicated that researchers should obtain

thick descriptions from participants. Similarly, I examined as many project documents as the participants allowed me to not just once, but iteratively. I also (e.g. after each interview, after each document review) reflected on whether the data is rich and thick. In cases where I felt that data was lacking, I sought clarification from participants, or requested access to additional documents that could provide additional relevant insight to answer the research question.

Guest, Bunce, and Johnson (2006) posited that data saturation might be possible with six interviews. Therefore, I interviewed and collected project documents from a minimum of six participants. Because data saturation is not prescriptive (Fusch & Ness, 2015; Guest et al., 2006), I worked toward data saturation by interviewing participants and reviewing project documents until the point of redundancy. I evaluated the data collected on an ongoing basis, comparing new interview and project documentation data to any previously gathered data. Elo et al. (2014) noted that researchers might continue to collect data even when no new information is uncovered to confirm that redundancy has occurred. However, Marshall, Cardon, Poddar, and Fontenot (2014) warned against collecting data substantially beyond data saturation as it may contribute to researchers' inability to process all the information. As per the recommendations of several researchers (Elo et al., 2014; Marshall et al., 2014), I confirmed data saturation, but not by more than one interview.

Population and Sampling

I used a nonrandom purposive sampling technique. A purposive technique is appropriate when researchers want to recruit specific participants intentionally based on

certain characteristics or attributes (Chandani et al., 2016; Jones et al., 2016). In this study, it was important to identify individuals who had served as project leaders and have led projects successfully; therefore, the nonrandom purposive approach was justified.

Yin (2014) indicated that a case study could comprise of a minimum of three and up to eight individuals. Yin's participant count aligns with Guest et al. (2006), who postulated that data saturation might be possible with six interviews. Data saturation occurs when no new information is uncovered (Colombo et al., 2016). In this study, I achieved data saturation when participants' responses and document reviews revealed no new information. Based on the experiences of Guest et al., I interviewed and collected project documents from nine participants. Fusch and Ness (2015) explained that data saturation occurs when researchers obtain rich descriptions, which enables them to conclude that no new data and no new themes are present. Therefore, I continued interviewing and collecting project documents from as many participants are necessary to achieve data saturation or the point of redundancy. I evaluated the data collected on an ongoing basis, comparing new interview and project documentation data to any previously gathered data. Using this approach, I determined whether data saturation was achieved, or whether additional interviews and project documents should be collected.

Finally, researchers should be cognizant of where interviews occur (Elwood & Martin, 2000). Elwood and Martin (2000) indicated that the location where interviews are conducted could be the researcher's or interviewees' decision, but allowing the participant to choose the site may allow them to feel more empowered. Elwood and Martin recommended that researchers explain the content of the interview to assist

participants in choosing an appropriate location, one where they could answer questions unencumbered. Because an informed consent is a prerequisite to any data collection, that document will help outline the purpose of the interview. When participants agreed to the interviews, I asked them their choice of interview location when scheduling.

Ethical Research

Informed consent is an important element of conducting ethical research (Health and Human Services, 2016). Grady (2015) described informed consent as a way to ensure self-determinism and respect for individuals' autonomy. From a process standpoint, informed consent also serves as the mechanism of communication between researchers and participants (Grady, 2015). Grady further explained that through the informed consent process, research participants enter into an agreement with investigators to proceed with the research study or to decline further involvement in the study. Riordan et al. (2015) added that informed consent is critical in outlining benefits and costs for participants. However, Bernhardt et al. (2015) cautioned researchers, indicating that researchers should not give equal weighting to all components of the informed consent. Rather, researchers should emphasize elements from the informed consent that participants are likely to misunderstand or have difficulty in comprehending, as doing so enhances the value of the informed consent process (Bernhardt et al., 2015).

In this study, I gave informed consents to all participants. The IRB at my partner organization served as the IRB of record. The IRB reviewed and approved my consent document and supervised all data collection for this study (approval 2017-50). Walden University oversaw my data analysis activities, with IRB approval number 10-06-17-

0344487. Elements of the informed consent included (a) invitation to consent, (b) background information, (c) procedures, (d) voluntary nature of the study, (e) risks and benefits of being in the study, (f) privacy and limits to confidentiality, (g) contacts and questions, and (h) statement of consent.

Instead of assuming that participants have read the informed consent, prior to collecting any data, I summarized and reviewed the informed consent, and emphasized key elements following the recommendations of Bernhardt et al. (2015). For example, I highlighted participants' procedures for withdrawing from the study. At any time, for any reason, without any repercussions, participants were entitled to withdraw from the study. I told participants they may submit their written request to withdrawal from the study to me. If participants were unable to contact me I instructed them to contact the Human Research Protection Program at my partner organization.

In addition to study withdrawal, I explained that there were no study incentives for participation. Smith, Macias, Bui, and Betz (2015) found that research incentives did not increase study participation. Others (Bouter, 2015; Health and Human Services, 2016) argued that incentives may compromise the voluntariness of participation. Tappin et al. (2015) used incentives because they were encouraging smoking cessation behaviors in pregnant participants. Because I did not want to compromise the ethicality or quality of my study, I decided against the use of incentives.

Furthermore, I explained there were no risks to participants. Being transparent about risks and benefits of study participation is a component of ethical research (Drake & Yu, 2016; Grady, 2015; Health and Human Services, 2016). I also paused throughout

the review of the informed consent to provide opportunities for potential participants to ask questions that may arise from reviewing the document as per the best practices outlined by several researchers (Barnhardt et al., 2015; Grady, 2015; Riordan et al., 2015). I invited participants who acknowledged their understanding of the informed consent and wished to continue with the study to indicate their desire to proceed by signing the consent form. I collected data only after consents were obtained.

Protection of individuals is paramount in conducting ethical research. One way researchers safeguard participants' dignity and rights once data collection has begun is by ensuring confidentiality (Casteleyn, Dumez, Van Damme, & Anwar, 2013; Gibson, Benson, & Brand, 2013). As the researcher, I protected the names of participants, as well as the organization they represented, thereby meeting my obligation to ensure confidentiality (Casteleyn et al., 2013; Nickson & Henriksen, 2014). West, Usher, Foster, and Stewart (2014) recommended keeping names confidential by using codes in place of participants' names. In following West et al.'s advice, I used codes in place of participants' names. I kept the key for codes on a password protected personal computing device. Confidentiality differs from anonymity. Vainio (2013) described anonymity as the method researchers use to edit their data to protect the identity of their participants. Finally, I will store the data collected from this study securely for 5 years.

Data Collection Instruments

Several authors (Erlingsson & Brysiewicz, 2013; Houghton, Casey, Shaw, & Murphy, 2013; Stewart, Gapp, & Harwood, 2017) stated that in qualitative research the researcher is the primary data collection instrument. Researchers go into the field,

interact with people in their natural settings, and seek to describe behaviors, meanings, and develop understanding or inferences (Othman & Hamid, 2017). Therefore, in this study, I did the same. I served as the primary data collection instrument, collecting information from participants in a detailed manner to gain rich descriptions in order to develop meaning and understanding.

Yin (2014) outlined six prominent data collection techniques: (a) direct observation, (b) interviews, (c) archival records, (d) documentation, (e) participant-observation, and (f) physical artifacts. Rowley (2014) defined interviews as a method researchers use to obtain and understand information through dialogue with another person. I collected data using one-on-one semistructured interviews. One-on-one interviews are preferred to other formats, like paired depth interviews. In paired depth interviews, researchers become observers, witnessing two participants interacting and engaging in discussion (Wilson, Onwuegbuzie, & Manning, 2016). Witnessing participants interacting was not congruent with my study because I wanted to interact with the participants directly.

Semistructured interviews include strengths of structured and unstructured interview methods, and allow researchers to achieve both consistency and flexibility (Dikko, 2016). Therefore, I used semistructured interviews. Dikko (2016) and Rowley (2014) indicated that semistructured interviews involved researchers asking questions in a relatively predefined order, but remaining flexible throughout the interview process. Several researchers (Dunn, Margaritis, & Anderson, 2017; Padgett, Gossett, Mayer, Chien, & Turner, 2017) have utilized the semistructured approach within the health care

setting. Rowley advised novice researchers to aim for approximately six to 12 well-written questions. My study consisted of seven questions. The questions are located in Section 1, Interview Questions. The interview protocol is located in Appendix A.

I also collected data by reviewing project documents that interviewees share. Documents could include things like project charters, project plans, project communication plans, project budgets, lessons learned documents, etc. There were two reasons why document reviews are appropriate. First, interviews and document review are common techniques to gather information (Wang, 2016). Second, Cho and Lee (2014) and Padgett et al. (2017) also used document review to triangulate and confirm information obtained through interviews, which enhances the quality of research.

I followed-up with participants using the member checking approach. Member checking is a method to ensure research quality and reliability by engaging the participant in reviewing the researchers' work (Harvey, 2015). Member checking affords participants an opportunity to verify information or research analysis accuracy and provide clarification (Morse, 2015). Carrington et al. (2014) posited that member checking is useful for checking researchers' interpretations of data. Morse (2015) indicated that researchers could provide the raw data or the completed analysis (or both) to participants. I described member checking in greater detail in the Data Collection Technique section. I triangulated data using project documents. Triangulation involves collecting data using multiple sources in order to enhance the researchers understanding of the topic (Wang, 2016).

Data Collection Technique

The research question was, what strategies leaders use to manage projects successfully in health care? Rowley (2014) argued that interviews are the preferred technique for researchers who are conducting studies in the qualitative domain because the data obtained through the interview technique may help researchers understand interviewees' experiences. This may be because questions are targeted and provide an opportunity for deep insight (Yin, 2014). Ranney et al. (2015) posited that interviews have the potential to yield rich data because participants may feel as though they are engaging in an extended conversation with the researcher. There are some shortcomings of interviews as a data collection technique. One might be researchers' ability to develop and ask interview questions in a friendly conversational manner (Yin, 2014). A second shortcoming may be participants' potential misunderstanding or misinterpretation in responding to interview questions (Yin, 2014).

There are two advantages to using a semistructured interview approach. First, the structured nature of questioning lends well to data collection consistency (Dikko, 2016). By using a relatively consistent interview protocol, the experiences of all participants will be relatively similar, enhancing data quality (Rowley, 2014; Yin, 2014). Second, the flexibility of the semistructured approach also makes the interview seem less rigid and more like a conversation, which may be more natural and comfortable for participants, again enhancing data quality (Yin, 2014). The semistructured approach was applicable in this present case study. Because I sought deeper knowledge about how teams ensure project success, I focused interview questions to solicit participants' experiences,

opinions, and perspectives on the research topic. The semistructured approach also contributed to data quality as well as serving as a more natural data collection process.

Prior to beginning any interviews, I obtained proper informed consent, and then followed the best practices outlined by several researchers. Ranney et al. (2015) suggested novice researchers utilize an outline format to build their interview guides. Representatives from university IRBs should review interview guides, also called protocols (Tavakol & Sandars, 2014). My interview protocol is located in Appendix A.

Ranney et al. (2015) recommended beginning with an introduction, explanation of ground rules, and confidentiality statement, which I did. Then, I asked an opening icebreaker question. The purpose of a low-key question is to minimize participants' anxiety, help them acclimate to the inquiry process, and to develop rapport (Ranney et al., 2015). Next, I asked participants substantive interview questions, following-up, and probing for thorough responses. Though Rowley (2014) indicated that researchers could adapt questions throughout the interview process, Tavakol and Sandars (2014) suggested that researchers using the semistructured approach should not deviate from the interview protocol in terms of the questions asked. Grossoehme (2014) recommended that researchers prepare potential follow-up questions and list them on the interview protocol. Ranney et al. suggested that researchers should offer a summary at the conclusion of the interview, allowing participants to clarify or refine their responses. Once the interview portion has concluded, researchers should take the opportunity to debrief, take notes, and record other observations that may help with the data analysis process (Ranney et al.,

2015). Following the practices of more experienced researchers, I also provided a summary at the end of each interview, debriefed, and took notes.

Furthermore, as described previously in the Data Collection Instruments section, I engaged project participants in member checking. Varpio, Ajjawi, Monrouxe, O'Brien, and Rees (2017) explained that member checking is a validation strategy or a way to check the dependability of researchers' findings. Researchers can use member checking at two stages, once upon data collection and subsequently after the researcher has analyzed the data, or offered interpretations (Varpio et al., 2017). In this study, I initiated member checking only at the initial opportunity, which was after I collected data from each participant. This was to ensure that I caught any errors early before beginning data analysis. I accomplished this by inviting all interviewed participants to review my notes and requested feedback regarding whether their perspectives were captured. I wrote my notes in my own words; they were not a word-for-word transcription of the interview. I also asked participants if they wished to contribute additional information to clarify thoughts they believe would be helpful to the study. I told my interviewees that participating in member checks was voluntary and not required. Because qualitative research is rooted in constructivist and constructionist epistemologies, it would not make sense to apply member checking at the end of the study (Varpio et al., 2017). This is because qualitative studies are rooted in the social interactions between researchers and participants and the interpretive process exercised by researchers (Varpio et al., 2017). Therefore, I did not perform a member check at the end.

Though Morse (2015) indicated that member checking might be a way for researchers to ensure the reliability of their findings, recently, he and several others (Birt, Scott, Cavers, Campbell, & Walter, 2016; Harvey, 2015) have suggested that member checking may have its shortcomings. Varpio et al. (2017) suggested that researchers can overcome these flaws by (a) explaining how and why member checking was used, (b) outlining how participants were invited to participate in the member check, (c) describing how many participants accepted the invitation to participate, and (d) delineating the changes that arose from the member checks, among other recommendations. In the description of the project, I outlined for what purpose member checks were being used, how participants were engaged in member checks, and that invitations for member checks will be open to all participants. In Section 3, I outline how many participants accepted my invitation and any changes that resulted from the checks.

Several authors (Owen, 2014; Yilmaz, 2014; Yin, 2014) indicated that document review is an appropriate data collection technique. I collected documents as part of my research data. Documents include a variety of artifacts such as emails, letters and notes (Yin, 2014) and administrative documents such as financial documents, budgets, and others (Owen, 2014). Because project teams create and maintain project documents, this was a highly appropriate method for collecting data in this study. Some shortcomings of this data collection technique included problems retrieving relevant documents, biased selectivity, reporting bias, and access (Yin, 2014). However, benefits to this data collection technique are that the documentation is stable and specific (Yin, 2014).

There are several types of standard project documents which were relevant to this study, for example, project charter, project budget, Gantt chart (or other means of tracking project schedule), quality management plan, staffing and resource plan, stakeholder register, risk register, risk probability matrix, and others. I asked study participants to email these documents to me at the conclusion of the interview and brought a copy of the signed letter of cooperation verifying the legitimacy of my request. Finally, I (a) stored and cataloged all documents to maintain accurate records of the documents, (b) stored all data in a locked system, and (c) will destroy the documents after 5 years.

Data Organization Technique

I maintained hardcopies of interview notes, as well as electronically transcribed files of the interviews and project documents. Hardcopies were stored in a physical folder, under my supervision, while I transmitted and stored electronic files on a password-protected computing device and network drive, preventing unauthorized access. I used TranscribeMe, a transcription organization that has top-rated security protocols. TranscribeMe utilizes microtasking workflow which segments uploaded audio files into smaller sections, distributed through their network of transcribers so that no one transcriber is permitted to see a complete data set (TranscribeMe, 2017). Additionally, TranscribeMe (2017) reported they are fully HIPAA-compliant. Corbett et al. (2016) also utilized TranscribeMe for their health care-based research. I will maintain the original data securely for 5 years.

I used NVivo 11 for Windows to code and create labeling systems when analyzing the data. I referred to other researchers' experiences and conclusions regarding NVivo to support my approach. First, several authors (Houghton et al., 2017; Woods, Paulus, Atkins, & Macklin, 2016; Zamawe, 2015) recommended the use of computer assisted qualitative data analysis software so that researchers can systematically analyze large volumes of data, ensuring the quality of their analysis. NVivo is one such program available to researchers. Woods et al. (2016) reported that NVivo and another qualitative data analysis program are used heavily in health science fields and countries like the United States, among others. This was relevant in my study because the case was based in the United States and within the health care domain. Woods et al. also indicated that NVivo and one other data analysis software program are commonly used to analyze data collected in interviews and documents as well as other qualitative data forms. In the previous section, I outlined that interviews would be my primary collection technique, with document review as my second. Finally, Houghton et al. (2017) reported that NVivo's functionality allows researchers to record their decision-making process relative to the analysis in an accurate, rigorous, and systematic manner, lending to greater trustworthiness of the study's findings.

Data Analysis

Hastings and Salkind (2013) indicated that methodological triangulation is the most common triangulation strategy. Methodological triangulation can be within-method or between-method, but the key characteristic is that researchers use multiple methods to address their research question (Joslin & Müller, 2016). For within-method triangulation,

researchers must use at least two data sources (Denzin, 1970). This is the triangulation method I used for this study. The two sources of data for this study were interviews and document review. Because rich, descriptive data from which researchers derive meaning are the hallmarks of rigorous qualitative research, it was imperative that I analyzed all data collected via interviews and document review.

It is also important to have a systematic approach to data analysis (Houghton et al., 2017; Woods, Paulus, Atkins, & Macklin, 2016; Zamawe, 2015). Costa, Breda, Pinho, Bakas, and Durão (2016) used thematic analysis because it is a systematic approach to identifying patterns and creating categories. Thematic analysis is not the same as analyzing the prevalence or occurrences of words or phrases (Fugard & Potts, 2015). Galvin, Gaffney, Corr, Mays, and Hardiman (2017) used thematic analysis due to its methodologically flexible approach to analyzing qualitative data. Based on the experiences of these researchers, I used thematic analysis to analyze my data.

An important antecedent in the process of qualitative data analysis is that researchers compile their data using a methodical and orderly approach (Yin, 2015). Yin (2015) also indicated that in this first step researchers should reacquaint with their data. This means that researchers should review recordings or transcribed files multiple times (Acharya & Gupta, 2016). Becoming familiar with the data is in keeping with thematic analysis (Fugard & Potts, 2015). For this study, I reviewed (a) transcribed files from the interviews, (b) member checked interview notes, and (c) project documents provided to me.

Next, Yin (2015) explained that researchers should proceed to disassemble their data. In this step, researchers should code data, identify patterns, and organize themes into relevant categories (Acharya & Gupta, 2016; Galvin et al., 2017). I accomplished this by using NVivo, as previously described in my data organization section. Several authors (Fugard & Potts, 2015; Galvin et al., 2017) also advised researchers to examine patterns or connections between or among categories. Chenail (2012) concurred and described qualitative data analysis as iterative and circular in nature. From these authors, I deduced that it was important to evaluate my coding and thematic organization not just once, but multiple times for both my interview transcripts as well as my documents, as indicated by the data findings. Through the lens of the contingency theory, potential themes included leadership, organizational structure, project complexity, communication, and relationship dynamics among project stakeholders.

In the interpreting phase, researchers synthesize their analysis by drawing unique meaning from the data, explaining the significance of the findings, and developing the narrative that frames the study's findings (Acharya & Gupta, 2016; Yin, 2015). Finally, researchers enter the concluding phase, which calls for additional research, outlines new concepts and theories discovered through the study, transfers findings, and takes or recommends action (Yin, 2015). I addressed this final phase in Section 3.

Reliability and Validity

Lincoln and Guba (1986) established four trustworthiness criteria by which qualitative studies are judged to demonstrate research rigor: (a) dependability, (b) credibility, (c) confirmability, and (d) transferability. Reliability in qualitative studies is

synonymous as dependability (Houghton et al., 2013; Munn et al., 2014). Validity of qualitative studies is credibility, confirmability, and transferability (Houghton et al., 2013).

Reliability

According to Polit and Beck (2012), dependability is demonstrated when data remains consistent over time. Cornelissen (2016) recommended using thick descriptions, which involves the researcher providing a highly detailed account of interviewees' perspectives, options, beliefs, and ideas for context. Eisenhardt (1989) offered triangulation of multiple sources as a quality metric to enhance reliability. Rosenthal (2016) suggested that researchers transcribe all interviews to ensure the quality of the data for research analysis. Finally, several authors (Marshall & Rossman, 2016; Rosenthal, 2016) recommended member checking as a way to enhance the reliability of findings. In member checking, researchers ask participants to confirm the data (Marshall & Rossman, 2016). I applied the following recommendations to my study (a) obtained thick descriptions, (b) used triangulation of multiple sources, (c) transcribed interviews, and (d) used member checking.

Validity

Credibility is the believability of or confidence in the findings (Lincoln & Guba, 1986). Graneheim and Lundman (2003) further described credibility as how well the researcher coded and categorized data, and the soundness of judgment of including relevant and excluding irrelevant pieces of data. Munn, Porritt, Lockwood, Aromataris, and Pearson (2014) referred to this as the goodness of fit between the data and the

researchers' interpretations. One method to enhance credibility is to quote representative texts from interviews (Graneheim & Lundman, 2003). In addition to using relevant quotes from both interviews and project documents, I followed the iterative data analysis procedures outlined previously. Cope (2014) recommended that researchers employ methods triangulation, where multiple sources of data are collected to enhance credibility. Because this was a case study, I employed methods triangulation by using interview and project document data. Finally, I used member checking as a way to enhance the credibility of my findings.

Confirmability in qualitative research occurs when data represents participants' responses (Cope, 2014). I accomplished this through several methods. First, I used my member checked interview notes. Using this information, I ensured that my data represented my participants' responses accurately. Additionally, Houghton et al. (2013) associated confirmability as researchers' ability to remain neutral, ensuring the trustworthiness of the findings. Several authors (Cope, 2014; Houghton et al., 2013) suggested that researchers could practice reflexivity by separating their personal biases and perspectives about the research topic. Therefore, my second strategy to ensure confirmability was to practice reflexivity by separating my biases and perspectives about project management strategies. Separating my biases ensured that the study findings reflect the ideas of my participants, not my own. Cope (2014) also suggested including direct quotes that justify study conclusions, which is similar to Graneheim and Lundman's (2003) recommendation to improve credibility. I followed other researchers'

(Cope, 2014; Graneheim & Lundman's, 2003) recommendations to use direct quotes as my last method for ensuring confirmability.

Transferability is how well the findings from the study can be transferred beyond the study sample (Graneheim & Lundman, 2003) to other settings or groups (Houghton et al., 2013). According to Graneheim and Lundman (2003), it is the readers' responsibility to evaluate and reflect upon research findings and whether they are applicable; researchers are only responsible for assisting readers to draw these conclusions. Depending upon the objectives of the study, transferability may not be relevant (Cope, 2014). To improve transferability, researchers should be very clear about the context and processes that framed their studies (Graneheim & Lundman, 2003). This is so consumers of the research data can evaluate whether the findings are applicable to them or not (Cope, 2014; Graneheim & Lundman, 2003). Marshall and Rossman (2016) also indicated that researchers cannot assume their findings are generalizable. Only other future researchers, who understand the context of the original study, can assess the implications or applications of the findings to their circumstances (Marshall & Rossman, 2016). Therefore, I did not draw conclusions about the transferability of findings from this study.

Several authors (Colombo et al., 2016; Fusch & Ness, 2015) described data saturation as something researchers achieve when no new or additional information is uncovered. Fusch and Ness (2015) argued that data saturation will vary for each research study. Guest et al. (2006) suggested that data saturation might occur with as few as six interviews. In this study, I worked toward data saturation by interviewing and reviewing

project documents from a minimum of six participants and continued until the point of redundancy.

Transition and Summary

In Section 2, I outlined the role of the researcher and provided a more detailed explanation of the project components, as well as the rationale for the proposed decisions. For example, I described the inclusion criteria for participants, why the qualitative research method using the case study design is appropriate, how I defined the population, and how the use of a nonrandom purposive sampling technique to acquire my study sample was useful. I also explained my data collection instruments and techniques, which were interviews and reviewing project documents, and how TranscribeMe and NVivo was used for data analysis. I also described methods to achieve reliability and validity as defined in the qualitative domain by examining the dependability, credibility, confirmability, and transferability of my study.

In Section 3, I present the findings from my qualitative single case study, the application to professional practice, and the implications for social change. I also discuss recommendations for action and further research related to project management strategies in health care. I conclude Section 3 by sharing my reflections and conclusions.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative single case study was to explore strategies that leaders use to manage projects successfully in health care. Successful projects are ones that finish on time and on budget and that meet the requirements listed in the project charter. To explore my topic, I interviewed nine project leaders (PL1-PL9) at a health care organization located in Pennsylvania. To be considered for the study, participants had to (a) be adults 18 years of age or older and employed by the organization under study, (b) have served in a project leader capacity within the last 5 years, and (c) have led projects that were deemed successful by executive management.

In addition to collecting and analyzing semistructured interview data, I also applied methodological triangulation by collecting and analyzing project documents that participants of this study shared as evidence of their project leadership. I identified four thematic categories. The first thematic category, essential strategies, is comprised of (a) the importance of communication, and (b) the need for flexibility. The second thematic category was relationship management and included two themes: (a) care for internal project team members and (b) attention to all other stakeholders. The third thematic category was the application of project management best practices, which included the themes of (a) clear expectations and (b) lessons learned. The last thematic category was self-attunement, which differentiated internal versus external skills, aptitudes, and competencies.

Presentation of the Findings

The research question was, what strategies do leaders use to manage projects successfully in health care? To answer this research question, I conducted semistructured interviews and collected project documents from nine eligible participants selected using a nonrandom purposive sampling technique. I followed my interview guide, which included obtaining consent first, then engaging the participants in an ice-breaker question about their most memorable project experience, and collecting my data by asking seven open-ended interview questions. All interviews occurred in locations specified by the participants and were completed within the 2-hour timeframe indicated on the informed consent.

While conducting the interviews, I took notes in my own words, which were subsequently typed and sent to participants to engage them in member checking. Varpio et al. (2017) recommended conducting member checking at the beginning of the data analysis process, which I did. I had 100% participation, which led to two opportunities for further clarification. The first opportunity was PL5's clarification regarding her supervisor's role versus title with respect to project stakeholder management. In the second opportunity, PL7 emphasized the importance of the project leader's role to support the project team.

I used TranscribeMe as my transcription service provider. I analyzed my data using NVivo 11 for Windows, which helped me code and create labeling systems to find themes within my data. I applied the coding system to the project documents that participants provided to me. Unlike the interviews, which I conducted using a consistent

interview protocol, I did not establish similar consistent data collection protocols for compiling project documents; the type, format, and volume of documents varied substantially from participant to participant. Additionally, using project documents as my secondary source of data proved challenging when some themes were not documentable. Thematic Category 4 includes project leaders' practice of self-attunement. Unlike project communication plans, project timelines, and other project management files, self-attunement is generally not a trackable project component. Therefore, my project documents were absent of any coding related to Thematic Category 4.

I organized my findings into four thematic categories. The thematic categories were (a) essential strategies, (b) focus on relationship management, (c) application of project management best practices, and (d) self-attunement. Each of the thematic categories consisted of two themes, for a total of eight. I analyzed thematic categories sequentially from A to D. I numbered the themes under each thematic category, continuously from 1-8. Figure 1 depicts the overall structure of my four thematic categories and eight themes. Themes 1 and 2 were pervasive and reflected in all thematic categories.

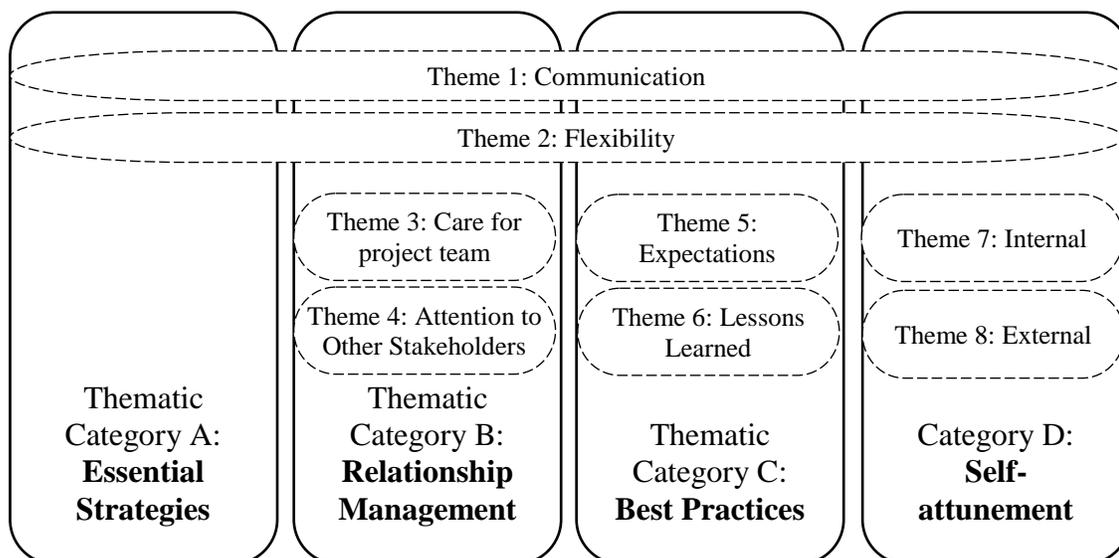


Figure 1. Successful project management findings structure.

Thematic Category A: Essential Strategies

In the first thematic category, I included communication and flexibility as Themes 1 and 2, respectively. I had initially planned to incorporate communication and flexibility into each of the thematic categories because they were present in all of them. However, their importance diminished when I presented the findings in this manner. Therefore, these themes were separated, given their own thematic category, and listed first because the themes were pervasive throughout the study. Because the findings were relevant for all thematic categories, I believed their relative importance was the greatest among all thematic categories. Additionally, while the interview data included strong evidence for both Themes 1 and 2, it was difficult to code project leaders' flexibility within the project document data. Like the limitations associated with finding evidence for the thematic category of self-attunement, data for a project leaders' flexibility mindset came primarily from the interviews, as it was infrequently codified in project documents.

Theme 1: Communication. Effective communication is an essential strategy to project management because a lack of it is linked to project failure (Dwivedi et al., 2015; Longenecker & Longenecker, 2014; Stanley & Uden, 2013). Communication is the first essential in this thematic category. Several participants (PL1, PL2, PL4, and PL9) described communication as one of the most critical elements to project success. For example, PL1 said, “I think number one is to have project management. The rest of it is communication.” To PL1, having project management meant utilizing a formalized project management framework. She also believed that communicating was the next most important project success strategy. PL1 even provided communication about communication. In her Microsoft PowerPoint® file, “Charge Capture Daily Call,” PL1 explained the purpose and agenda for daily charge capture calls, which was a communication mechanism she used with her project team. PL1 also explained the definition of charge capture and how participants could prepare for these calls.

PL9 agreed with PL1 that communication is critical for successful projects, and similarly listed the importance for having a communication plan secondary to other project management strategies: “I think it's important to develop a comprehensive change management and communication plan.” PL9 provided project communication plans, which support this theme. The first was in the form of a consultant report, which provided guidelines on how the organization should develop their communication strategy. Some examples of overall objectives were to “Create communication consistent with your mission, vision, values, and guiding principles” and “Effectively communicate with all stakeholders” (PL9). Participants also discussed communication from multiple

perspectives including (a) the need for different communication methods, (b) the need for communication structure, and (c) the benefits of communication.

Several participants (PL1, PL3, and PL4) discussed the need for different communication methods and frequency for different audiences. For example, PL1 stated:

It's not one thing or one method or one communication because, in our example, senior executives needed different level of update than the project team, than the operations management team, from the operations staff level team. It's different communication at different times. Senior executives needed a different level of update than the project team, than the operations management team, from the operations staff level team. I say this over and over but constant communication.

PL4 shared similar thoughts but discussed the need to tailor communication based on role and discipline, and not hierarchy or authority like PL1:

Different people like to communicate differently and receive information differently. So I adjusted that. Some wanted more face to face. Some wanted more reports. I'm dealing with a variety of stakeholders from IT to clinical folks to construction people and they all speak different languages, and they all communicate differently and have different expectations.

PL9 provided documents that supported the idea that different stakeholders should receive information differently. During PL9's project, the organization hired project communication consultants, who recommended that project leaders send separate messages to highly compensated employees to inform them of how the project would impact them (PL9). Similarly, the communication consultants recommended that human

resources personnel receive “train-the-trainer information before employee announcement” (PL9). In the second communication plan document, PL9 outlined the various communication mechanisms she used, including formal presentations, emails, brochures, meetings, web communication, mailed letters, and on-site promotions.

PL3 also discussed various forms of communication he uses. Some examples were pull planning meetings, big room meetings, huddle boards, dashboards, and the company intranet. PL3 explained that unlike PL1 and PL4, the size and scope of projects affects his preferred type of communication. For example, “With bigger projects, we'll have a weekly huddle where we'll talk to the dashboard.” Even though a multimodal and frequent communication strategy may create redundancies in project information, PL4 indicated that repetition is necessary because, even though he may communicate multiple times, it could be the first time a stakeholder truly listens to his message. “That's something I had to learn throughout this process—to really be comfortable with just saying the same thing over and over and over and over and over again because you have so many different stakeholders” (PL4). PL1 and PL2 concurred with PL4, all believing that communication is such a critical strategy for project success that they had, as a goal in managing projects effectively, to overcommunicate.

Participants also discussed the need to communicate using structured approaches. For example, PL7 indicated that there was a “regimented process for meetings,” with some project stakeholders meeting weekly while the project steer team met biweekly. PL1 agreed, and said she scheduled her project daily check-in calls at shift changes. PL1 and PL7 concurred on the importance of meeting regularly with different stakeholders.

Additionally, PL1, PL7, and PL2 indicated that the agendas for these meetings were standard from one meeting to the next meeting. For example, PL1's agenda included each cost center reporting out on two topics, "One was to go over charge capture to make sure that all the charges are being captured as we expected. And the second was the rest of the revenue cycle." PL9 comments encompassed all the aforementioned examples. She described the importance of "establishing a regular cadence" to manage communication tightly in order to more easily implement projects. The cadence she referred to regarding meeting frequency and discussion topics (PL9). PL9 also provided project documents that indicated the need for a structured approach to employee messaging, "Through the communication effort, here's what participants should know, feel, and do." PL9's documents also included examples of how leaders could apply this structure to the communication needs of the project. Based on my analysis, the communication consultants provided a framework for the organization to follow to ensure that communication was effective.

Not only is communication important at the beginning of projects, there are benefits to incorporating it throughout the project lifecycle. PL4 said, "Communication is paramount and really setting the overall target of what you're trying to achieve from a project management perspective." For example, several participants (PL3, PL6, PL7, and PL8) described communication as a way to mitigate potential project issues. PL7 stated:

I would meet with them [project team] to go through any issues they may have and then we updated the steer, the executives on the meeting. So again, I think we

had really good, throughout the project, communication, discussion to make sure there was nothing that was creating any issues between the team.

Not only is communication effective for addressing team dynamic issues, it can also help address current and future project roadblocks, or what PL3 referred to as “inhibitors” to project success. For example, PL2 provided project documents that reported project updates. These documents contained updates regarding contracting (“service contracts completed”, “medication supply contracts completed”), issues with “plan enrollment and Medicaid coverage,” constraints associated with “medical record management,” pending issues such as “orientation,” and other topics (PL2). PL8 agreed, citing that communication affords opportunities to assess project performance, “You've got to say wait a minute we're drifting here. Let's go back and reassess this or we don't have the resources to do that.” Additionally, PL8 even welcomed communication that was “contrarian” in nature stating, “I want to hear from this. I don't want it to go underground.” One might interpret this to mean that PL8 would rather have an early, candid, and potentially uncomfortable discussion about a project rather than allowing dissention to fester and grow unaddressed. Conversely, communication can do more than mitigate issues.

According to the participants, effective communication can also enhance project performance. PL8 said, “You have to be open and solicit that from the people at the table. Listen to them; they may have a better way to do this than we do.” Similarly, PL3 said that project leaders should create a “safe environment” in which project participants can admit failure or errors early in the project process, “If this project's going over

budget, I'd rather know now, rather than you surprising me at the end.” PL4 also utilized psychologists to help improve communication, which led to reduced staff anxiety, increased staff engagement, and additional opportunities for ongoing dialogue and updates pertaining to the project. Communication is an important theme, and is present in all thematic categories.

Theme 2: Importance of Flexibility. This theme, like Theme 1, was pervasive in all thematic categories and all participants in this study responded with the need for flexibility as one of their strategies for project success. Eriksson, Larsson, and Pesämaa (2017) found that for infrastructure projects, flexibility enhanced project performance. Though the present study was not set in the construction industry, hospitals undergo construction projects and therefore one could find Eriksson et al.’s conclusions relevant. For example, PL8 said that project leaders should make sure projects are “tightly aligned but loosely managed,” “to be persistent and flexible.” PL2 named specific health care interests as well as stakeholder groups that makes flexibility an essential strategy for project leaders:

Healthcare is so complex because you have the clinical interests with the policy interests, with regulatory interests, versus the business interests, financial interests, you have the multiple stakeholders of the physician as the clinician, the physician as the business person. I think it's really important not to be naive towards all of those different factors, and you have to patiently survey the project and make sure that you've included all possible aspects.

PL2 provided a project update document that listed one way he showed flexibility, which was to build in “contingency” for a particular physician. It is unclear from PL2’s document whether he needed to build contingency from a provider availability standpoint, or from a compensation standpoint. However, this coded excerpt illustrates the need to be flexible to changing conditions. Within this theme, the participants described flexibility as it pertains to (a) stakeholder management, (b) project leader and project management style, (c) communication. Because I previously provided evidence of the need for flexibility when communicating in Theme 1, I did not repeat the analysis in this section. As a reminder, the participants from my study communicated with different stakeholders differently, which relates to Gustavsson’s (2013) recommendations that communication should be tailored to the needs and preferences of the receiving party.

Flexibility in managing stakeholders is similar to the need for flexible communication strategies. However, stakeholder management is focused on connecting and building relationships with people. As PL6 described, “I think to be an effective manager and be an effective kind of leader of people, you have to figure out the way to connect best with people individually.” Like communication strategies, in order to form relationships on an individual level, project leaders must be flexible in how they approach each stakeholder, “Relationship-based management is essential and it’s different and you need to be flexible in how you apply it” (PL6). Similarly, PL8 admitted that project leaders cannot satisfy 100% of everyone’s wishes and desires 100% of the time. He described the flexibility needed to manage stakeholders as a “yin and yang” relationship,

where project leaders need to engender a shared sense of project purpose while simultaneously outlining project limitations (PL8).

Project leaders also need to be flexible in their project management approaches, an idea that was shared among multiple participants (PL4, PL6, and PL9). For example, PL4 said:

I think that also being able to be adaptive in your project management style—I don't necessarily know whether or not I would use the same style or technique in a different project because there would be different stakeholders, and it would be different interactions and things of that nature, so I think the ability to be adaptive. Similarly, PL6 compared two projects he worked on, one large and one smaller to make a point that project management approaches vary with each project. PL6 explained:

So it's variable, right, in the level of depth and detail that you get into depending on the complexity of the thing and the people who are involved. And so the budgets, the risk, the quality, complexity, will all help dictate the need for the project planning materials.

PL9 also shared two specific examples in which she managed relationships with nurses and physicians during her project:

Nursing can be vocal when they're not happy, and so then that hurts your project. So you have to manage that stakeholder a little differently, with more handholding. We actually put a process in in the middle of go-live called Office Hours for Nursing, and we went to them. And it worked really, really well. Understanding the impact on the physician is a differentiator for projects in

healthcare. They too have to be managed differently. They have to be managed differently and realistically and appropriately. They require much more change management and realistic expectations.

These three leaders all believed that flexibility in dealing with stakeholders and maintaining positive relationships with them was an important project management strategy for achieving project success.

Thematic Category B: Focus on Relationship Management

Thematic category B underscores the importance of Meng and Boyd's (2017) findings, which were that project management as a discipline has shifted away from planning and control functions and moved toward managing relationships and valuing people. Eskerod and Vaagaasar (2014) agreed that stakeholder management is critical to health care project success. The two themes that comprise the second thematic category are care for the project team and attention for all other stakeholders.

Theme 3: Care for the project team. The first theme, care for the project team, describes the project leaders' ability to support internal members of the project team. As expressed by PL3, support from the project leader precedes any project-related work, "I truly believe it starts at that point if you want to build the mindset of a fully high performing team. You need to do that at the beginning." PL3 described a strategy he uses to build his teams, which is that each team member has a voice in the subsequent team members that are selected to be part of the project, "So you might be the first person I brought on, now you're part of me picking the third team member. Then those three people are part of bringing on the fourth team member." By sharing the decision of who

comprises the project team, PL3 instilled a greater sense of ownership in the project's success.

Additionally, PL8 thought it was important to question the viewpoints represented by the team members. PL8 said, "there's equal toxicity on total agreement and total disagreement; you have to find a blend there." PL5 and PL8 expressed a related idea pertaining to team composition, which is the importance of understanding the strengths and weaknesses of each team member. By knowing how each person can contribute to the team, PL5 and PL8 were alluding that project work can be assigned and completed more effectively when individual strengths and weaknesses are taken into consideration. For example, "Not every style works in every situation. Sometimes you need data people and detail people. Sometimes you need visionary people" (PL8). These findings relate to Böhm's (2013) assertion that project leaders should account for individuals' personalities and their work experiences as part of team management.

The participants in this study recognized that their role as project leaders was to provide support and advocacy, and is the second way that project leaders can demonstrate care for their teams as an effective project management strategy. PL1 said:

You don't have to know every detail of every workflow, but it's important to the team that you have a clue what it is they do. And I think if you can demonstrate that you have a clue what they do, you have a better chance of earning their trust so that when there are issues, they'll tell you what's going on and then you can be the barrier buster to do whatever it is you need to do.

Showing support and advocacy is important considering that insufficient project sponsorship by top-level leaders contributes to project failure (Dwivedi et al., 2015). PL7 agreed with PL1's comments about supporting the work of frontline staff who are the most knowledgeable about daily operations. Therefore, PL7 said he made sure to plan time to listen to his project team's concerns regularly so that he could adequately convey issues or resource needs on behalf of his team. Similarly, in a project document that PL4 provided, he expressed the need to solicit project team feedback, "Need to discuss interest regarding the family medicine nurse practitioner." Making time to obtain feedback demonstrates care for the team and the project leader's attention to managing relationships. Beyond planning time to listen or merely requesting input into project decisions, however, project leaders also need to use the feedback their teams provide. PL2 did this, which was recorded in his project steering committee update, "[Name of design agency] attempting to redesign to accommodate feedback." PL6 added that advocacy includes helping to navigate relationships throughout the organization, "Whether it's helping to keep senior management up to date on the status or calling out conflict or difficulties where your team is encountering them." These three projects leaders saw it as a personal responsibility to obtain and use feedback, remove hurdles, or acquire necessary resources for their teams.

Project leader presence can also be a form of demonstrating care and affirmation for the project team. PL7 showed this in making himself readily available to this team, "I met with them all at least once a week but most of the time more frequently than that." Similarly, PL5 stated:

I think, too, being on the ground with them in very difficult times—I wasn't walking out the door at 5:00 or my lead tech wasn't either. We were here for them and telling them how much we appreciated them and what they were doing.

PL9 was present with her team by making sure they had fun as a team, “I tend to feed people. I tend to use humor quite a bit or try to, and just relax with them and get them to understand this was really hard work.” These three examples illustrate that project leader presence can be in the form of availability, physical presence, and the quality of the interactions when present with the team. Project leader presence aligns with Iacob's (2013) description of leader attention being equivalent to leaders' level of project engagement.

Supporting the project team can also be celebrating their successes. PL2 remembered giving credit to the project team at a VIP opening event, which included the president of the organization and some of the board of trustees. PL2 said, “I think it gave a lot more pride to the team, to say that they had a role in all of that, acknowledging that publicly.” As PL2 alluded, there is a greater sense of ownership in a project when team members believe they were part of the decision-making process and that their ideas and opinions mattered and were supported by the project leader. PL9 used similar strategies, by acknowledging the hard work of her team, asserting her pride in their project work, and celebrating.

Theme 4: Attention to all other stakeholders. The next theme within this thematic category, attention for all other stakeholders, describes the project leaders' ability to engage and manage the multitude of people and relationships surrounding the

project. Some examples of stakeholders might be health system patients, patients' families, third-party payers, employees, which can include physicians and other clinical providers, nonemployed physicians, vendors, and others. As an example of others, PL9 provided a 16-month milestone timeline that included components like "stakeholder assessment summary," "communications kick-off," "train the trainer sessions," "system testing," and others. The component I chose to code to Theme 4 was, the need to gain input from a partner organization (PL9). Paying attention to partner organizations amidst a project implementation illustrates a strong commitment to managing relationships by paying attention to other stakeholders, which is one of the themes for successful project management.

Several participants (PL5, PL6, and PL8) agreed that the stakeholders in the health care industry are mission-oriented. And because stakeholders are focused on fulfilling an organizational promise to customers, managing relationships hinges on aligning projects with improvements in patient experience or clinical outcomes. For example, PL6 shared that reminding people about the purpose of the project is important, "because we're a mission-based industry, and mission-based organization, bringing it back to the patient and the community is the right thing to do and also, the point where most people don't disagree." PL5's sentiments were similar, "Being in the healthcare context, it matters. The results to the patient matters. It's a shared interest." PL5 provided her project scope statement document, listing "improved patient care" and "improved technology to provide improved results" as business values for implementing the project. Similarly, PL7 listed on his project scope statement document, "improve quality of care

by increasing quality of candidates.” PL8 also indicated that the mission is not only compelling, but a catalyst to engage stakeholders, “We always start with the why. What is the compelling reason that we're there? And what our shared values are, start with the fuel that precipitates the fire.” Communicating shared interests is a strategy that participants in this study used to develop and manage relationships in order to execute projects successfully.

Beyond a shared sense of purpose, nearly all participants (PL2-PL9) described the various ways in which they connected with their stakeholders to manage relationships for project success. For some (PL2 and PL3) it was as simple as evaluating stakeholder needs and perspectives. For example, PL3 stated:

Set up the conditions of satisfaction at the beginning and do it from everybody's perspective, and because everybody—the IT person has a different perspective on what's going to make it successful than the nurse does, than the contractor, than the architect, than the materials management to any of them.

Similarly, PL9 called attention to her strategy of addressing relationships in an industry that is fragmented:

Healthcare is so siloed that you have to put strategies in place to make sure you're touching each business unit as appropriate and in those cases where projects are going to affect the relationship as they do exist between business units, you have to call that out and address it.

In healthcare, having multidisciplinary teams are essential for successful project execution (Guédon et al., 2015).

There were also other specific examples participants provided of how they manage relationships. For example, PL2 highlighted the importance of conflict resolution. PL2 believed that self-interests of project stakeholders can sometimes prohibit projects from gaining traction or moving forward. Therefore, PL2 expressed the need for project leaders to identify stakeholders with conflicting interests through consensus then to work toward a resolution in a logical manner. In this manner, relationships remained intact because issues were addressed with a spirit of collegiality prior to the situation worsening. Similarly, PL4 talked about the need to help different stakeholders find compromise. In his example, PL4 indicated that both he and a physician leader compromised on the amount of project details available at a given time and how they could communicate better. While facilitating conflict resolution and compromise connote potentially unfavorable project circumstances, they are real and present in project management. PL2 and PL4 did not shy away from potentially undesirable relationship situations, but rather confronted them with success.

Other participants also discussed strategies for enhancing and leveraging relationships that already exist. For example, PL4 explained that even in situations where he did not have direct relationships with certain influential individuals, that he had indirect connections through his project or management teams. By leveraging his team members' relationships, PL4 was able to directly benefit from already established organizational relationships. PL4's comment aligns with PL8's comments that "political capital," "informal networks," "informal culture in the organization" are important assets for project leaders to use. PL4 also shared a situation where stakeholders were engaged

and supportive of an idea but required the project leader to engage them in a conversation about the project to formalize the support. PL4 referred to this as “greasing the wheels,” an effective strategy to manage relationships and maintain forward project momentum. PL5 agreed and reported that she has “learned who to talk to ahead of time.” The examples for enhancing and leveraging relationships are ways to find connection and capitalize upon relationships for achieving project outcomes.

Thematic Category C: Application of Project Management Best Practices

Several researchers (Badewi & Shehab, 2016; Joslin & Müller, 2015; Mathur et al., 2014) concluded that applying project management practices is important to project success. The thematic category of applying project management best practices comprises of two themes, set clear expectations and apply lessons lessons. In order to set clear expectations, project leaders need to use effective communication. PL3 gave an example of the importance of communication in setting expectations among the hospital and its subcontractors during construction projects in order to meet project deadlines, “I think you share with them the expectations and they say, ‘I’m not going to have enough of the resources,’ or they know it early enough so we can have time to get it.” Similarly, when applying lessons learned, project leaders need to document and communicate what those lessons are. PL8 alluded to this when he said, “Behavioral standards, training, standard work, sharing stories, that's all good stuff.” I believe the former relates to the need to document best practices, where “sharing stories” (PL8) implies the need to communicate those lessons. In the following paragraphs, I give additional evidence of the two themes of setting expectations and applying lessons learned.

Theme 5: Clear expectations. Several authors (Stanciu et al., 2016; Thamhain, 2013) indicated that communication is the lynchpin for project success because it provides clear project direction. Seven of the nine participants (PL1-PL3 and PL6-PL9) mentioned the importance of clarity as an effective project management strategy. For example, PL3, PL8, and PL9 outlined the necessity to review and agree upon the conditions of satisfaction, or the project's goals, at the very beginning with all stakeholders involved. PL9 also underscored the importance of refining the scope in relation to the project's goals, which aligns with Collins, Parrish, and Gibson's (2017) findings, that good scope definition can have a direct relationship to project success. PL7 and PL5 both listed several project inclusions and exclusions in support of PL9's comments and Collins et al.'s findings about refining scope. For example, PL7 indicated the following were out of project scope, "transactional history data conversion, time-keeping module, cost center restructuring, and [Name of child company]." Having clarity on what is part of the project and what is outside of the project documented helps set clear expectations for project stakeholders. Project leaders who successfully complete projects were clear in documenting and communicating project parameters.

PL8 added that the project goals needed to be clarified and align with the mission of the organization, "We have a mission within the mission of the organization. What is it that we're trying to accomplish? What is our goal?" By this PL8 wanted to convey that projects have goals, which can be interpreted as project mission, which is set in the context of the larger organization mission. By staying focused on and communicating the project and organization missions, project leaders can provide greater clarity to

stakeholders. I am inferring that PL8 attributed his project success partially to his ability to set clear expectations regarding project mission and the alignment of that mission to the larger organizational mission.

Several participants (PL1, PL6, and PL7) described a different set of expectations relating to project role clarity. PL6 was specifically describing the need for a role to manage the mechanical elements of project management. PL2 and PL7 extended the idea by including the need to delineate how project stakeholders were to interact. Specifically, PL2 referred to this as “rules of engagement.” Similarly, PL1 indicated that project participation expectations were clear specifically about decision-making authority, “The expectation was that if you were a member of that team, you had the authority and the ability and the desire to make decisions.”

Once clarity is established, all participants expressed the need for accountability. Burga and Rezania (2017) found that accountability went through various stages of translation via the project actors. In other words, project leaders interpreted how accountability for a particular project would be measured. The responses varied across my participants regarding accountability. Though PL3 indicated the importance of accountability from both his project leader perspective and his teams and other stakeholders, the other participants were split in their interpretation of accountability into two broad categories. The first category was a focus on project leader accountability, where participants discussed ways in which they felt personally accountable to the project. The second category included participants’ interpretation that they needed to hold others accountable to their project contributions.

As an example of project leader personal accountability PL4 said:

You have a huge responsibility to carry on your shoulders and it's your obligation as a leader of the project to acquiesce to the stakeholders and to determine how can you move them, how can make them more productive and how can you have this project run much more efficiently.

PL2 expanded on this sentiment of project leader personal accountability and said, "You should be able to delegate responsibilities and then make sure that you have a very tight accountability on the deliverables down the road. You now can manage the project because you have oversight." This comment, though it alludes to the need for others to be accountable to work assigned to them, is written from the project leader's perspective. PL2 spoke of his personal responsibility to ensure that the project stayed on track and met its objectives. For example, PL5, even though she was the project manager, still listed on her project timeline notes, "[Name] to do that." I interpreted this to mean that she held herself accountable to project assignment in the same way she held her project team accountable to their contributions. Accountability is not limited to the present; PL5, in speaking about future projects remarked:

I think it's going to get even tougher going forward because the dollars aren't there. I think if you really want a new technology or a new whatever, you're really going to have to do your homework and present your business case.

PL5 was inferring the responsibility of project leaders to do their due diligence and be accountable for managing future projects successfully.

There were more examples of project leaders holding other project contributors accountable, with five of the nine participants (PL1, PL4, PL5, PL6, and PL8) commenting specifically about accountability. The majority of project documents I analyzed were also related to holding others accountable. Given that projects have goals and project leaders have to monitor progress toward achieving goals, it is understandable why participants submitted a large proportion of project documents related to accountability. Multiple study participants (PL1, PL4, PL5, PL7, and PL9) provided project documents which either identified and tracked key performance indicators (KPIs). For example, PL1 provided a dashboard that tracked KPIs such as “length of time in workqueues,” “registration claim edits,” “outstanding high dollar amounts,” “MSPQ completed, partially completed, blank” and many more on a daily basis during project go-live. PL1 also provided a financial dashboard which tracked daily charges and compared them against expected charges on a daily basis and also provided a running week’s period of information. PL4 provided a project overview presentation, in which workgroup accountabilities were clearly identified. For example, the accountability for the psychiatric emergency services workgroup was to “Develop transition plan and future model of PES, with a proposed model due by 10/17, pilot 10/18, and final model 4/18” (PL4). These examples illustrate the strategy of holding others accountable as a strategy project leaders use to achieve project success.

PL6 and PL8 remarked that establishing accountability and follow through were key management attributes in project management. For example, PL6 explained that in meetings, project leaders can ask for updates, “Well, [Name], last week when we met

you were going to work on the thing. So what do you have for us today'?" The purpose of directing targeted questions to specific individuals was not embarrass them or to be malicious (PL6). Rather, it was to establish accountability expectations for everyone, including "other people in the room" (PL6). PL4 agreed, adding that making project participants provide verbal and written reports about their project contributions also gives project stakeholders a shared sense of ownership in the project allowing "everyone to know what the big picture is." PL1 explained that her role was to point out when operational leaders failed to be accountable for project decisions they made. If the operational leaders complained about how workflows were designed, she would remind them of their responsibility to have made thoughtful decisions during the project, "When you showed them the future state workflow and said, 'Well, this is what we agreed to and this is what we did and this is what it does,' that took a lot of the wind out of their sails." PL5 provided an example of holding project vendors accountable when the project was not meeting their expectations:

So we would have weekly calls where everybody knew what they were accountable for, and also the vendor was always on those calls. I am just a straight shooter. I'm honest with people. I try to hold them accountable. And a lot of times I was giving feedback to [Vendor] to the point where I just was not happy about how it was going. And they actually even brought a VP in here with an entourage. We really tried to hold them accountable to what they had said they would do.

PL1 also provided a leadership action plan timeline that used specific language to convey accountability. For example, “As a leader it is your responsibility to determine how information is cascaded down and throughout your departments” and “Please note that there is an expectation that you will need to meet the predetermined target completion dates” (PL1). All of these examples represent the idea that project leaders take ownership for holding project participants accountable for their contributions to project success.

Theme 6: Lessons learned. Failure to learn from lessons learned is a pervasive problem, contributing to higher levels of project failure (Duffield & Whitty, 2015). The participants in this study, however, purposefully exposed and documented project failures in order to capitalize on lessons learned from those experiences and commit to drawing from that knowledge in the future. For example, PL5 provided a project document, which contained a section titled, “lessons learned.” Some of the agenda items included questions such as, “what went well,” “what could have gone better,” and “what did we forget to ask” (PL5). Some of the responses included, “Project manager was not informed immediately of issues [from the vendor],” “Communication between phone support can be better,” and “Not enough on-site support after the instrument was installed” (PL5). Project leaders documented these lessons as a way to ensure future project continue doing things that favorably impact project performance and discontinue things that unfavorably impacted the project. This concept of lessons learned is equivalent to PL3’s comments in Theme 7 about the need for reflection.

Participants also maintained a positive outlook regarding project failures. PL8 stated, “I’m a real believer in continuous learning and I’m a believer in chronicling failures,” and indicated that he believes failures are part of the learning process. As a specific example, PL9 described a shortcoming in adequately resourcing a current project, which she hopes will serve as lessons learned in the future, “We did not take enough people out of their jobs, and that was a lesson learned for us.” PL9 demonstrated her ability to reflect on her performance, which is an essential component of developing lessons learned. Developing and learning from lessons learned is not limited to personal experiences, as evidenced by PL4’s response. PL4 discussed how he relied on lessons learned from others to inform his project management approach, “I said, ‘Can we use LEAN to do project management?’ So I spoke to our director of quality improvement and she said, ‘Our partners did use that when they were implementing Epic, the electronic medical record.’”

PL5 discussed the lesson learned of leveraging organizational knowledge to ensure project success, “[Name] and I basically designed the entire lab. So I had a good idea of how to really logistically make it happen, who needed to be involved, when they needed to be involved.” PL2 offered similar thoughts:

If you know that eventually a certain aspect of the project is going to have to go to a specific committee or a certain executive for approval, giving them notice and heads up well prior to that, give them an update on the status of the project in anticipation that they're going to have to get involved, will help you proactively address their concerns prior to it getting to them. So I think it's really important to

understand the governance of the system, understand the approval entities within the organization, how they're interrelated and then keeping them informed preemptively.

Leveraging organizational knowledge helped PL5 and PL2 manage their project schedules and resources. Slightly different than using one's own knowledge, PL4 shared that one of his project team members was a tenured employee in the health system. He said that the employee was "knowledgeable about the system, and knowledgeable about all aspects. You can say three or four words to her, and she kind of knows, 'Oh, you go talk to this person. Go talk to that person.'" When applying lessons learned by leveraging organizational knowledge, successful project leaders do not rely exclusively on their own experiences. Rather, a strategy they use to achieve project success is to leverage their organizational network.

There were other examples of project lessons learned. For example, PL7 indicated that he used the organization's EHR project architecture from several years ago to inform the project he recently led, "We sat down and we identified what people's roles were going to be. How they were supposed to interact. We had a charter of what we were supposed to accomplish. There was a timeline that everybody agreed upon." Because the most recent project PL7 led was similar in size and scope to the EHR project, many of the project processes were relevant and applicable during his project. PL1 also continues to use lessons learned from the EHR project. The first example was the use of daily calls post go-live to monitor project implementation. PL1 explained that during the EHR project, department project liaisons participated in daily calls to report project issues.

PL1 indicated that because the process was so effective for a large EHR project she insisted on its use for every project regardless of size or scope, including the most current one we discussed during the interview. In PL1's recent project, she also referred to lessons learned from a project nearly 20 years ago to give context to resourcing needs. PL1 explained that recounting historically unfavorable project outcomes served as an effective reminder:

When we did a project similar to this in 1999, cash flow was affected severely. And this time, one of the primary goals was that cash flow would not be affected by this go-live. So knowing that was the goal, if we needed something, I can always say, 'Well, here's the deal. If you don't want cash flow to be affected, this is what I need from you.'

Thematic Category D: Self-attunement

The fourth thematic category contains project leaders' self-attunement as it relates to themselves (internal) and how it affects their interactions with others (external). In the following sections, I provide evidence from the interview and project document data that support the two themes.

Theme 7: Self-attunement–internal. Caldwell and Hayes (2016) found that self-awareness leads to increased leader effectiveness. In this study, five of nine participants (PL1, PL3, PL4, PL6, and PL8) discussed the importance of self-awareness. The first type of self-awareness included leaders' understanding of their personal strengths and weaknesses. PL8 clearly indicated that he was "not a data person." Similarly, PL4 shared his strengths and weaknesses:

I also am comfortable with letting people who are experts—we have a lot of experts that are more knowledgeable in circumstances than I am, lead. And I'll follow from behind and I will promote and do things that I have a strength in. So I'm very comfortable with that.

PL4 understood the limitations of his expertise and this self-awareness allowed him to set his pride aside and allow others to share their expertise. But this did not mean that PL4 was a passive project leader. He continued, saying that his skills were in looking at the bigger picture, and “also looking for ways to create efficiencies to operationalize things that may not be easily operationized. And enhancing relationships that already exist.” PL4's point was that project leaders need to understand their personal strengths as well as the strengths of others in order to optimize everyone's contributions. The importance of communication is also highlighted in PL4's statement, as project leaders are not able to enhance relationships without effective communication. PL6 added that strengths and weaknesses are not limited to skills and competencies, but also to other factors such as biases, emotional intelligence, and personality profile.

Self-awareness also comprises of the need for leaders to self-monitor. Lam, Walter, and Huang (2017) found that self-monitoring relates to subordinates' perceptions of leadership. PL8's example of self-monitoring included the need to assess where he was in the project journey and do a “gut check.” I believe he demonstrated self-awareness when he (a) discussed the need for leaders to be thinking multiple steps in advance, and evaluating whether he was doing so, and (b) described how he can sometimes react to situations because he is passionate, and that he has to keep those

visceral reactions in check. Similarly, PL4 indicated that throughout the project he self-monitors and resists the urge to react, “It requires patience and really challenging yourself because it becomes personal, and so you don't want to make it personal.” In the two scenarios above, it could be inferred that both PL8 and PL4 believe that communicating carefully and thoughtfully is an important component of self-monitoring. Self-monitoring is also applicable in terms of project time management, “I try to allocate my time on things that are important versus things that are urgent. I have to have a timeline for myself” (PL4). In this quote, PL4 was referring to the need to self-monitor in order to stay focused on the project targets. Self-monitoring is an important self-attunement component, which assisted the project leaders who participated in my study achieve project success.

Finally, project leaders demonstrated self-awareness by building in time for self-reflection. For example, PL1 discussed an opportunity for improvement, “One of the things I don't think we did well is have enough contingency time.” This quote infers PL1's ability to examine her performance against a standard or ideal performance and identify the gaps. Similarly, PL4 reflected on his personal feelings of frustration and sought to identify the root cause of those frustrations. Once he did, he realized the information he needed to present to his project stakeholders to increase buy-in. PL3 not only reflected on the opportunities for improvement, but also built in time to highlight project processes that went well. To accomplish this, PL3 includes time at each project meeting called “plus-delta,” which is equivalent to an earlier discussion regarding lessons learned. PL3 explained, “If you don't have a reflection at the end of it, you're not going

to get better at it next time.” In PL3’s situation, reflection is an opportunity to communicate shortcomings and also best practices. By doing so, as a project leader he can ensure that he continues encouraging those things they have a positive effect on project success and mitigate those things that do not.

Theme 8: Self-attunement–external. While in the previous theme I described ways that project leaders need to be internally attuned to their personal aptitudes, attunement also affects how project leaders interact externally from themselves. Emotional intelligence (EI) is a leadership competency that, when applied, can result in effective managerial decisions and calm and coordinated teamwork (Chang, Vacanti, Michaud, Flanagan, & Urman, 2014). Project leaders should act with EI, as supported by seven of the nine participants (PL1, PL2, PL4-PL6, PL8, and PL9). For example, PL1 cautioned against project leaders becoming emotional, but rather suggested they are logical, rational, and know how to differentiate when to ask for help versus working through the problem. PL2 agreed, “And I try to remain very neutral—my approach is very logical, just focus on the project itself and the objectives at hand and try to resolve issues.” Similarly, I believe PL4 was exercising EI when he indicated that when he gets frustrated, he knows the best course of action is to be present and listen.

A related competency to EI is the ability for project leaders to gain trust and confidence from others. Mastrogiacomo et al. (2014) indicated that trust affects communication, thereby influencing project performance. In my analysis, I found evidence that suggested my participants believed it is important for project leaders to be attuned to their skills in building trust and gaining others’ confidence. For example, PL1

stated, “You need to put people in the leadership positions that people already have confidence in.” Similarly, PL5 stated, “I just think you have to almost have a proven track record.” PL2 agreed, “Fortunately, I've established strong respect and reliability from the stakeholders within the organization. That helped me at [Organization name] as well because [Organization name] was able to attest to my reliability.” PL4 echoed these remarks and indicated that his supervisor vouched for PL4’s credibility and therefore his professional reputation played a role in allowing others to trust him.

Several participants (PL2, PL4, and PL7) also discussed the importance of taking actions to gain project stakeholders’ trust. For example, PL2 described the process as an “audition to get their trust.” Additionally, PL2 took steps to continue retaining trust, “Get those approvals and try to expedite resolution, avoid bureaucracy, avoid delays.” In this example, PL2 was trying to highlight the importance of achieving project deliverables, which would result in stakeholders’ confidence in the project leader. PL4 agreed and said “your ability to deliver on small items is extremely important. You really have to prove yourself.” PL7 demonstrated his insistence on finding errors when installing a new program. He wanted to make sure the end users of the project could trust him to make appropriate project decisions. Though the software vendor pushed back at times, thinking the errors were minimal, PL7 was resolute and told the vendor, “It's someone's pay and I'm going to make sure it's right and if there's a difference I'm going to know why there's a difference and it better be because something is wrong now that you're fixing.” In PL7’s case, he was attuned with his skill of accuracy and how advocating for accuracy would instill a sense of trust among project stakeholders. PL7 was also required to

communicate effectively with the vendor to make sure there was clarity regarding project expectations. Taking steps to gain project stakeholders' trust and confidence was a strategy used by project leaders to achieve project success.

Alignment of Findings to Contingency Theory

Several authors (Maqbool et al., 2017; Miterev et al., 2016; Sauser et al., 2009) argued that a one-size-fits-all approach is not appropriate for project management. Maqbool et al. (2017) proposed that project success hinges on a variety of factors, which is why contingency theory was an appropriate conceptual framework for this study. Fiedler (1964) introduced contingency theory as a leadership effectiveness model. Though Fiedler's (1964) original contingency theory dealt with leadership effectiveness, in recent years, researchers have used the contingency theory to describe a class of theories that indicate outcomes as contingent on a variety of factors. In this study, all of the participants spoke of the need for flexibility based on project circumstances. The need to be flexible or change project management plans and methodologies based on changing factors and circumstances illustrates the applicability of contingency theory. PL3 provided multiple project dashboards, which listed between 8-10% contingency funds for projects, ranging from approximately \$100,000 to \$639,000. This indicated that effective project leaders plan for unforeseen circumstances and fund their projects accordingly.

Through my data analysis, I found evidence that affirmed my use of contingency theory for this study in the various themes. Theme 2, flexibility, which was part of Thematic Category A, essential strategies, aligned precisely with contingency theory.

Contingencies imply a need for flexibility. I categorized the evidence in support of Theme 2 into ways project leaders need to exercise flexibility regarding (a) stakeholder management, (b) project leadership styles and project management approaches, as well as (c) project design and implementation. Flexibility infers that project leaders need to adapt their project management practices to different circumstances, stakeholders, and project characteristics. Theme 1 also supported the need for project leaders to remain flexible in project communication. Specifically, I found that participants adjusted their communication methods and frequency based on stakeholder needs and preferences. Themes 1 and 2 support contingency theory as a relevant and applicable conceptual framework to the practice of project management.

Thematic categories B through D also aligned with contingency theory. The main tenet of contingency theory is that project success hinges on a variety of factors (Maqbool et al., 2017). Theme 3, care for the project team, illustrated that team development is contingent on people's strengths and weaknesses, and the project leader's ability to create team diversity and synergy. Theme 4 relates to contingency theory in that project leaders must manage relationships with stakeholders differently, based on who the stakeholders are. Project leaders must also outline project accountabilities differently based on the stakeholder for whom they are setting expectations, which connects contingency theory with Theme 5. Theme 6 showed that depending on the experiences of project leaders and other project participants, lessons learned are different, and the application of lessons learned in the future will vary. Themes 7 and 8 outline ways successful project leaders practice self-attunement relative to their personal aptitudes and skills. A result of

attunement results in flexibility in dealing with oneself (Theme 7), as well as others (Theme 8). For example, if project leaders practice self-awareness, they know when others on the project team are subject-matter experts and adapt their leadership accordingly, which supports Theme 7. When project leaders attempt to gain trust and confidence from project stakeholders, they adapt their interaction techniques based on who those stakeholders are, which supports Theme 8.

Applications to Professional Practice

The purpose of this qualitative single case study was to explore strategies project leaders use to manage projects successfully. The findings and recommendations from this study may be of value to the field of business and may help future leaders manage projects effectively. Projects continue to fail at an astounding rate regardless of the type of project, or the industry from which they originate (Ramazani & Jergeas, 2015), wasting billions of dollars each year (Harrington & Frank, 2015). Wasted resources are unproductive and can undermine overall business success and competitive advantage of health care organizations. If project leaders understand project management strategies better, it may improve project success rates and decrease wasted resources. Leaders of business who can optimize their resources have the potential to increase overall business success.

The population consisted of project leaders at a health care organization located in Pennsylvania, who complete projects successfully on a routine basis. Successful projects are ones that finish on time and on budget and that meet the requirements listed in the project charter. Nine study participants shared their experiences in managing projects

successfully in health care, which others can apply to their projects. Health care organizations are businesses whose leaders must achieve positive bottom lines for the facilities to remain operational. Therefore, it is critical for leaders to understand strategies they can use to manage health care projects with more efficiency and better outcomes. In doing so, health care organizations may enhance expense management, improve project quality outcomes, increase adherence to schedules and project timelines, meet stakeholder expectations, and other reasons.

Additionally, the findings from this study are relevant to professional practice because the extant literature is limited regarding effective project management practices in health care. Though research exists in industries where the discipline of project management is more common, such as information technology, construction, and others (Anholon & Sano, 2016; Bildosola et al., 2015; Iqbal et al., 2015; Qianqian et al., 2017), health care is a unique industry. Therefore, a study of strategies health care project leaders use to manage projects successfully may contribute to health care professionals' enhanced understanding of the practice of project management. In the health care industry, which is only beginning to adopt the formal project management methodologies, this study might provide valuable insight and practical applications.

Implications for Social Change

This study may contribute to positive social change if health care leaders can use the information to enhance their project leadership, thereby affecting organizational performance positively. By applying the findings from this study, health care project leaders may (a) communicate more effectively, (b) demonstrate flexibility in all aspects

of project management, (c) focus on managing relationships, (d) apply project management best practices, and (e) practice self-attunement. Individual project leader benefits cascade to health care organizations, ultimately affecting the communities in which the health care organization exists positively.

Several researchers (Dwivedi et al., 2015; Longenecker & Longenecker, 2014; Stanley & Uden, 2013) have linked the lack of or failed communication to project failure. The findings from this study showed that project leaders should use different modalities and frequencies of communication based on stakeholder needs and preferences and develop a structured communication plan. If project leaders can apply this finding to their professional practice, they may be able to communicate their messages better with project stakeholders, which may lead to better project outcomes. Similarly, I found that project leaders who manage health care projects successfully are highly agile. The prevalent areas in which they practiced flexibility was communication management, stakeholder management, project leadership and project management styles, and project design and implementation. Health care project leaders can apply these flexibility strategies, which may result in better project performance.

Project leaders should also consider ways they can demonstrate care for project teams and give attention to all stakeholders in order to manage project relationships effectively. Some specific strategies may include showing support and advocating for project teams, being present, celebrating successes, resolving conflicts, and other strategies. Project leaders might also follow the advice of the study participants in setting clear project expectations and applying lessons learned. Finally, project leaders need to

practice self-attunement. Through my analysis, I uncovered specific strategies such as demonstrating self-awareness, self-monitoring, and engaging in self-reflection. Because project leaders interact with a variety of stakeholders, self-attunement, as it pertains to external audiences, includes a leader possessing EI and gaining the trust and confidence of others. All of these strategies have the potential to affect project leader performance and ultimately project and organizational success.

The success of health care organizations directly influences their ability to uphold their mission statements. Health care facilities exist to serve individuals and communities. Therefore, enhancing their performance has a cascading positive effect on society. When health care organizations are successful, the leaders of those organizations can ensure that important health and wellness services are provided and available to those who need them. Additionally, leaders of successful health care organizations can fund performance improvement initiatives, support quality programs, and offer innovative services to individuals and communities to increase health outcomes.

Recommendations for Action

The findings from this study may benefit health care project leaders and health care administrators. Health care project leaders could apply the recommendations to enhance their professional practice of managing projects. One recommendation may be for project leaders to obtain formal training related to effective communication strategies. A formal training program may help project leaders develop their communication skills by providing current evidence-based techniques and tips. A second recommendation is for project leaders to develop more robust methods to calculate slack in their project

schedules to buffer against project delays and budget sufficient contingency funds to address unplanned expenses. Though the application of flexibility extends beyond project timelines and budgets, these are often the major factors that lead to project failure (Flyvbjerg, 2014). For example, in order to develop better contingency models to address shortcomings in project timelines and budgets, project leaders may consider collecting and analyzing historical project data for trends or patterns that may serve as an algorithm for future project contingency planning. A third recommendation is for project leaders to routinely schedule time getting to know project stakeholders. This may involve casual and informal meetings for coffee, sharing meals, or other social opportunities to build relationships. Taminiau and Wiersma (2016) indicated that social gatherings are often required to solidify and strengthen business relationships. A fourth recommendation is for project leaders to enlist the help of external project management consultants, or at the very least, a project mentor. Project leaders could debrief or discuss issues related to project progress as a way to remain accountable for their project management strategies and additionally gain alternative perspectives and ideas on how to be a better project leader. A recommendation for health care administrators is to support project leaders in accomplishing the four aforementioned recommendations.

I plan to disseminate my research findings to my project participants as well as the CEO of the health care organization where I conducted my study. Walden University will publish my study in ProQuest/UMI dissertation database, therefore other students or individuals interested in project success strategies in health care may have access to my findings. If appropriate opportunities arise, I may share my research with my employer,

colleagues at professional conferences, or attendees at other professional gatherings. I may also consider submitting my manuscript to professional or trade publications.

Recommendations for Further Research

There are several recommendations for further research. First, future researchers should consider expanding the study design to include multiple case studies. For example, a nation-wide study may increase the strength and applicability of the findings. Future researchers may also consider designing a study that takes into consideration different types of health care facilities. For example, future researchers could compare for-profit health care organizations' project success strategies against those used in not-for-profit organizations. Future researchers could also explore whether facility size (number of beds) or facility type (academic acute-care, community acute-care, long-term care, rehabilitation and others) yield similar or different results with respect to project management success strategies.

Future researchers may also design their research to address the limitations of this study. For example, one of the criterion included executive management input regarding the success of project leaders to determine participant eligibility. Instead, future researchers could provide more specific parameters or markers of project success. A second limitation was that I could only review project documents that participants chose to provide. This was limiting because not all participants submitted the same type or number of project documents, making comparisons inconsistent. In the future, I would recommend that researchers define specific project documents from all participants.

Reflections

I have several reflections pertaining to my experience in the doctor in business administration program. First, I am grateful for the opportunity to continue refining my academic writing skills. Through interacting with peers in the course discussion boards and the doctoral study committee and the URR's evaluations of my proposal and project, I have improved my writing. For example, I have examined sentence formation, word choice, and the effect these have on reader comprehension and document flow.

Additionally, I have honed my ability to express ideas succinctly and clearly.

Second, my Walden experience has enhanced my research skills. Before writing Section 2, I had a personal bias on how member checking should be done. However, this program forced me to justify all my decisions pertaining to how I would conduct my study. The most meaningful was my examination of Varpio et al.'s (2017) approach to member checking. Varpio et al. argued that member checking processes needed to be congruent with the nature of qualitative research methodology. Following Varpio et al.'s approach to member checking required me to (a) intently focus on participants' responses during the interviews, (b) review and make sense of my interviewees' responses shortly after having conducted interviews, and (c) type my notes for the purpose of conducting member checks. These actions allowed me to immerse myself in the data multiple times in quick succession. It also gave me the opportunity to connect with my participants shortly after the interviews occurred, which I believe led to a high rate of member checking participation, which was 100%. Through the member checking process, I had the opportunity to clarify my understanding of strategies my participants used to achieve

project success. I believe member checking led to better validation and higher reliability of my findings.

Last, I believe my Walden student experience has had a positive impact to my professional practice as an assistant professor. In having the roles reversed, I can better empathize with my students and understand the stress associated with being a working adult pursuing an advanced degree. I believe this knowledge has helped me relate better with my students. For example, knowing how challenging Blackboard discussion formatting can be allows me to provide guidance and advice to my students so they avoid similar frustrations. I have also learned best practices for developing course assignments, creating clear rubrics, and designing intuitive online course navigation

Conclusion

Ramazani and Jergeas (2015) indicated that projects fail at an alarming rate. However, the findings from this single case study revealed that achieving project success does not have to be elusive. I answered my research question, what strategies do leaders use to manage projects successfully in health care, with the assistance of nine project leaders who have a track record of managing successful projects at a health care organization in Pennsylvania. The participants provided simple and effective strategies to achieve project success consistently. For example, project leaders should communicate effectively, be flexible with their project management practices, demonstrate care for internal project team members, pay attention to all stakeholders involved in projects, set clear expectations, track and use lessons learned, and be self-attuned both internally and externally. Many of these strategies to achieve project

success are rooted in effective communication, relationship, and stakeholder management practices. None of the strategies revealed through this study were complex nor costly.

Because the health and well-being of individuals and communities are at stake when health care organizations experience high project failure rates, it is important for project leaders to use effective project management strategies to ensure that projects are successful. I suggested that project leaders use the findings and recommendations from this study to enhance their project management capabilities to align with strategies used by successful project leaders. If health care project leaders do so, they may affect organizational performance positively. When health care organizations are successful, individuals and communities benefit.

References

- Abdallah, A. (2014). Implementing quality initiatives in healthcare organizations: Drivers and challenges. *International Journal of Health Care Quality Assurance*, 27(3), 166-181. doi:10.1108/IJHCQA-05-2012-0047
- Acharya, A., & Gupta, M. (2016). An application of brand personality to green consumers: A thematic analysis. *The Qualitative Report*, 21(8), 1531-1545. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Adams, D. P., & Miles, T. P. (2013). The application of Belmont Report principles to policy development. *Journal of Gerontological Nursing*, 39(12), 16-21. doi:10.3928/00989134-20131028-07
- Albliwi, S., Antony, J., Abdul Halim Lim, S., & Van der Wiele, T. (2014). Critical failure factors of Lean Six Sigma: A systematic literature review. *The International Journal of Quality & Reliability Management*, 31, 1012-1030. doi:10.1108/IJQRM-09-2013-0147
- Allen, M., Carpenter, C., Hutchins, M., & Jones, G. (2015). Impact of risk management on project cost: An industry comparison. *Journal of Information Technology & Economic Development*, 6(2), 1-19. Retrieved from <http://www.gsmi-ijgb.com/Pages/Journals.aspx>
- Allen, M., Herring, K., Moody, J., & Williams, C. (2015). Project procurement: Impact of contract incentives and penalties. *International Journal of Global Business*, 8(2), 1-26. Retrieved from <http://www.gsmi-ijgb.com/Pages/Journals.aspx>
- Ament, S. C., Gillissen, F., Moser, A., Maessen, J. C., Dirksen, C. D., von Meyenfeldt,

- M. F., & van der Weijden, T. (2014). Identification of promising strategies to sustain improvements in hospital practice: A qualitative case study. *BMC Health Services Research, 14*, 641-664. doi:10.1186/s12913-014-0641-y
- Andreassen, H. K., Kjekshus, L. E., & Tjora, A. (2015). Survival of the project: A case study of ICT innovation in health care. *Social Science & Medicine, 132*, 62-69. doi:10.1016/j.socscimed.2015.03.016
- Anholon, R., & Sano, A. (2016). Analysis of critical processes in the implementation of lean manufacturing projects using project management guidelines. *International Journal of Advanced Manufacturing Technology, 84*, 2247-2256. doi:10.1007/s00170-015-7865-9
- Anthopoulos, L., Reddick, C. G., Giannakidou, I., & Mavridis, N. (2016). Why e-government projects fail? An analysis of the Healthcare.gov website. *Government Information Quarterly, 33*(1), 161-173. doi:10.1016/j.giq.2015.07.003
- Aronson, Z. H., Shenhar, A. J., & Patanakul, P. (2013). Managing the intangible aspects of a project: The affect of vision, artifacts, and leader values on project spirit and success in technology-driven projects. *Project Management Journal, 44*(1), 35-58. doi:10.1002/pmj.21322
- Artto, K. A., & Dietrich, P. (2007). Strategic business management through multiple projects. In P. W. Morris, & J. K. Pinto (Eds.), *Project Program & Portfolio Management* (pp. 1-33). Hoboken, NJ: John Wiley & Sons.
- Ashour, A. S. (1973a). Further discussion of Fiedler's contingency model of leadership effectiveness. *Organizational Behavior and Human Performance, 9*, 369-376.

doi:10.1016/0030-5073(73)90059-7

Ashour, A. S. (1973b). The contingency model of leadership effectiveness: An evaluation. *Organizational Behavior and Human Performance*, 9, 339-355.

doi:10.1016/0030-5073(73)90057-3

Badewi, A., & Shehab, E. (2016). The impact of organizational project benefits management governance on ERP project success: Neo-institutional theory perspective. *International Journal of Project Management*, 34, 412-428.

doi:10.1016/j.ijproman.2015.12.002

Baird, S., & Boak, G. (2016). Leading change: Introducing an electronic medical record system to a paramedic service. *Leadership in Health Services*, 29(2), 136-150.

doi:10.1108/LHS-04-2015-0012

Barney, J. B. (1986). Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, 30, 1231-1241. doi:10.1287/mnsc.32.10.1231

Bawa, P., & Watson, S. L. (2017). A phenomenological study of graduate Chinese students' English writing challenges. *The Qualitative Report*, 22, 779-796.

Retrieved from <http://nsuworks.nova.edu/tqr/>

Bekker, M. C. (2014). Project governance: "Schools of thought." *South African Journal of Economic and Management Sciences*, 17(1), 22-32. Retrieved from

http://www.journals.co.za/ej/ejour_ecoman.html

Bekker, M. C. (2015). Project governance: The definition and leadership dilemma. *Procedia Social and Behavioral Sciences*, 194, 33-43.

doi:10.1016/j.sbspro.2015.06.117

- Bell, E. E. (2017). A narrative inquiry: A black male looking to teach. *The Qualitative Report*, 22, 1137-1150. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Benia, L. R., Hauck-Filho, N., Dillenburg, M., & Stein, L. M. (2015). The NICHD investigative interview protocol: A meta-analytic review. *Journal of Child Sexual Abuse*, 24(3), 259-279. doi:10.1080/10538712.2015.1006749
- Bernhardt, B. A., Roche, M. I., Perry, D. L., Scollon, S. R., Tomlinson, A. N., & Skinner, D. (2015). Experiences with obtaining informed consent for genomic sequencing. *American Journal of Medical Genetics Part A*, 167, 2635-2646. doi:10.1002/ajmg.a.37256
- Bharadwaj, S. S., Chauhan, S., & Raman, A. (2013). Impact of knowledge management capabilities on knowledge management effectiveness in Indian organizations. *Vikalpa: The Journal for Decision Makers*, 40, 421-434. doi:10.1177/0256090915613572
- Biedenbach, T., & Müller, R. (2012). Absorptive, innovative and adaptive capabilities and their impact on project and project portfolio performance. *International Journal of Project Management*, 30, 621-635. doi:10.1016/j.ijproman.2012.01.016
- Bildosola, I., Río-Belver, R., Cilleruelo, E., & Garechana, G. (2015). Design and implementation of a cloud computing adoption decision tool: Generating a cloud road. *PLoS ONE*, 10(7), 1-20. doi:10.1371/journal.pone.0134563
- Birchall, S. J., Murphy, M., & Milne, M. (2016). Mixed methods research: A comprehensive approach for study into the New Zealand voluntary carbon

- market. *The Qualitative Report*, 21, 1351-1365. Retrieved from <http://nsuworks.nova.edu/tqr>
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking a tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26, 1802-1811. doi:10.1177/1049732316654870
- Böhm, C. (2013). Cultural flexibility in ICT projects: A new perspective on managing diversity in project teams. *Global Journal of Flexible Systems Management*, 14, 115-122. doi:10.1007/s40171-013-0037-6
- Boonstra, A. (2013). How do top managers support strategic information system projects and why do they sometimes withhold this support? *International Journal of Project Management*, 31, 498-512. doi:10.1016/j.ijproman.2012.09.013
- Boonstra, A., van Offenbeek, M. G., & Vos, J. J. (2017). Tension awareness of stakeholders in large technology projects: A duality perspective. *Project Management Journal*, 48(1), 19-36. doi:10.1016/j.ijproman.2015.09.006
- Bouter, L. M. (2015). Commentary: Perverse incentives or rotten apples? *Accountability in Research*, 22, 148-161. doi:10.1080/08989621.2014.950253
- Bradbury-Jones, C., Breckenridge, J., Clark, M. T., Herber, O. R., Wagstaff, C., & Taylor, J. (2017). The state of qualitative research in health and social science literature: A focused mapping review and synthesis. *International Journal of Social Research Methodology*. Advance online publication. doi:10.1080/13645579.2016.1270583

- Bresnan, M. (2016). Institutional development, divergence and change in the discipline of project management. *International Journal of Project Management*, 34, 328-338. doi:10.1016/j.ijproman.2015.03.001
- Burga, R., & Rezania, D. (2017). Project accountability: An exploratory case study using actor–network theory. *International Journal of Project Management*, 35, 1024-1036. doi:10.1016/j.ijproman.2017.05.001
- Buvik, M. P., & Tvedt, S. D. (2017). The influence of project commitment and team commitment on the relationship between trust and knowledge sharing in project teams. *Project Management Journal*, 48(2), 5-21. Retrieved from <https://www.pmi.org/learning/publications/project-management-journal>
- Caldwell, C., & Hayes, L. A. (2016). Self-efficacy and self-awareness: Moral insights to increased leader effectiveness. *Journal of Management Development*, 35, 1163-1173. doi:10.1108/JMD-01-2016-0011
- Callary, B. (2013). Three ethical issues in narrative research of women coaches' lifelong learning. *The Qualitative Report*, 18, 1-14. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Campbell, S. (2014). What is qualitative research? *Clinical Laboratory Science*, 27, 3. Retrieved from <http://www.ncbi.nlm.nih.gov/>
- Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2014). Lost in translation: Exploring the ethical consumer intention–behavior gap. *Journal of Business Research*, 67, 2759-2767. doi:10.1016/j.jbusres.2012.09.022
- Casteleyn, L., Dumez, B., Van Damme, K., & Anwar, W. (2013). Ethics and data

protection in human biomarker studies in environmental health. *International Journal of Hygiene and Environmental Health*, 216, 599-605.

doi:10.1016/j.ijheh.2013.03.016

Chan, Z. C. Y., Fung, Y., & Chien, W. (2013). Bracketing in phenomenology: Only undertaken in the data collection and analysis process? *The Qualitative Report*, 18, 1-9. Retrieved from <http://nsuworks.nova.edu/tqr/>

Chandani, Y., Duffy, M., Lamphere, B., Noel, M., Heaton, A., & Andersson, S. (2017). Quality improvement practices to institutionalize supply chain best practices for iCCM: Evidence from Rwanda and Malawi. *Research in Social and Administrative Pharmacy*. Advance online publication.

doi:10.1016/j.sapharm.2016.07.003

Chang, B. P., Vacanti, J. C., Michaud, Y., Flanagan, H., & Urman, R. D. (2017). Emotional intelligence in the operating room: Analysis from the Boston Marathon bombing. *American Journal of Disaster Medicine*, 9(2), 77-85.

doi:10.5055/ajdm.2014.0144

Chang, J. T. (2017). Mutual monitoring of resources in an enterprise systems program. *Project Management Journal*, 48(1), 100-115. Retrieved from <https://www.pmi.org/learning/publications/project-management-journal>

Chatman, J. (2014). Culture change at Genentech: Accelerating strategic and financial accomplishments. *California Management Review*, 56(2), 113-129.

doi:10.1525/cm.2014.56.2.113

Chenail, R. (2012). Conducting qualitative data analysis: Reading line-by-line, but

analyzing by meaningful qualitative units. *Qualitative Report*, 17(1), 266-269.

Retrieved from <http://www.nsuworks.nova.edu/tqr/>

Cheung, S. O., Yiu, T. W., & Lam, M. C. (2013). Interweaving trust and communication with project performance. *Journal of Construction Engineering and Management*, 139, 941-950. doi:10.1061/(ASCE)CO.1943-7862.0000681.

Cho, J. Y., & Lee, E. (2014). Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *The Qualitative Report*, 19, 1-20.

Retrieved from <http://nsuworks.nova.edu/tqr/>

Cleland, D. I. (2007). Strategic management: The project linkages. In P. W. Morris, & J. K. Pinto (Eds.), *Project Program & Portfolio Management* (pp. 63-79). Hoboken, NJ: John Wiley & Sons.

Collins, W., Parrish, K., & Gibson Jr, G. E. (2017). Development of a project scope definition and assessment tool for small industrial construction projects. *Journal of Management in Engineering*, 33(4), 04017015. doi:10.1061/(ASCE)ME.1943-5479.0000514 verified via Ulrichs, peer-reviewed, need page numbers

Colombo, T., Froning, H., Garcia, P. J., & Vandelli, W. (2016). Optimizing the data collection time of a large-scale data-acquisition system through a simulation framework. *The Journal of Supercomputing*, 72, 4546-4572. doi:10.1007/s11227-016-1764-1

Conklin, T. A. (2013). Work worth doing: A phenomenological study of the experience of discovering and following one's calling. *Journal of Management Inquiry*, 21, 298-317. doi:10.1177/1056492611414426

- Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, *41*(1), 89-91. doi:10.1188/14.ONF.89-91
- Corbett, A., Nunez, K. M., Smeaton, E., Testad, I., Thomas, A. J., Closs, S. J.,...
Lawrence, V. (2016). The landscape of pain management in people with dementia living in care homes: A mixed methods study. *International Journal of Geriatric Psychiatry*, *31*, 1354-1370. doi:10.1002/gps.4445
- Cornelissen, J. P. (2016). Preserving theoretical divergence in management research: Why the explanatory potential of qualitative research should be harnessed rather than suppressed. *Journal of Management Studies*, *54*, 368-383.
doi:10.1111/joms.12210
- Costa, C., Breda, Z., Pinho, I., Bakas, F., & Durão, M. (2016). Performing a thematic analysis: An exploratory study about managers' perceptions on gender equality. *The Qualitative Report*, *21*(13), 34-47. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Crema, M., & Verbano, C. (2016). Identification and development of lean and safety projects. *Safety Science*, *89*, 319-337. doi:10.1016/j.ssci.2016.07.007
- Cseko, G., & Tremaine, W. (2013). The role of the Institutional Review Board in the oversight of the ethical aspects of human studies research. *Nutrition in Clinical Practice*, *28*, 177-181. doi:10.1177/0884533612474042
- Curatolo, N., Lamouri, S., Huet, J. C., & Rieutord, A. (2014). A critical analysis of lean approach structuring in hospitals. *Business Process Management Journal*, *20*, 433-454. doi:10.1108/BPMJ-04-2013-0051

- Dao, B., Kermanshachi, S., Shane, J., Anderson, S., & Hare, E. (2016). Identifying and measuring project complexity. *Procedia Engineering, 145*, 476-482.
doi:10.1016/j.proeng.2016.04.024
- DeFillippi, R., & Roser, T. (2014). Aligning the co-creation project portfolio with company strategy. *Strategy & Leadership, 42*(1), 30-36. doi:10.1108/SL-10-2013-0075
- Denzin, N. K. (1970). *The research act: A theoretical introduction to sociological methods*. New York, NY: McGraw Hill.
- Denzin, N. K. (2013). Performing methodologies. *Qualitative Social Work, 12*, 389-394.
doi:10.1177/1473325013493533
- Dikko, M. (2016). Establishing construct validity and reliability: Pilot testing of a qualitative interview for research in Takaful (Islamic insurance). *The Qualitative Report, 21*, 521-528. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Doskočil, R. (2016). An evaluation of total project risk based on fuzzy logic. *Verlas: Teorija ir praktika / Business: Theory and Practice, 17*(1), 23-31.
doi:10.3846/btp.2015.534
- Dowling, G., & Moran, P. (2012). Built in or bolted on? *California Management Review, 54*(2), 25-42. doi:10.1525/cmr.2012.54.2.25
- Dunn, P. J., Margaritis, V., & Anderson, C. L. (2017). Understanding health literacy skills in patients with cardiovascular disease and diabetes. *The Qualitative Report, 22*, 33-46. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Drake, S. A., & Yu, E. T. (2016). Using biomedical ethics model to explore use of

postmortem specimens in tissue research. *Open Medicine Journal*, 3(1), 234-237.

doi:10.2174/1874220301603010234

Duffield, S., & Whitty, S. J. (2015). Developing a systemic lessons learned knowledge model for organisational learning through projects. *International Journal of Project Management*, 33, 311-324. doi:10.1016/j.ijproman.2014.07.004

Dwivedi, Y. K., Wastell, D., Laumer, S., Henriksen, H. Z., Myers, M. D., Bunker, D.,... Srivastava, S. C. (2015). Research on information systems failures and successes: Status update and future directions. *Information Systems Frontiers*, 17(1), 143-157. doi:10.1007/s10796-014-9500-y

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14, 532-550. doi:10.2307/258557

Ekrot, B., Kock, A., & Gemünden, H. G. (2016). Retaining project management competence: Antecedents and consequences. *International Journal of Project Management*, 34, 145-157. doi:10.1016/j.ijproman.2015.10.010

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

Elwood, S. A., & Martin, D. G. (2000). "Placing" interviews: Location and scales of power in qualitative research. *The Professional Geographer*, 52, 649-657. doi:10.1111/0033-0124.00253

Eriksson, P. E., Larsson, J., & Pesämaa, O. (2017). Managing complex projects in the infrastructure sector: A structural equation model for flexibility-focused project

management. *International Journal of Project Management*, 35, 1512-1523.

doi:10.1016/j.ijproman.2017.08.015

Erlingsson, C., & Brysiewicz, P. (2013). Orientation among multiple truths: An introduction to qualitative research. *African Journal of Emergency Medicine*, 3, 92-98. doi:10.1016/j.afjem.2012.04.005

Escobar-Rodríguez, T., & Romero-Alonso, M. (2014). The acceptance of information technology innovations in hospitals: Differences between early and late adopters. *Behaviour & Information Technology*, 33, 1231-1243.

doi:10.1080/0144929X.2013.810779

Eskerod, P., & Vaagaasar, A. L. (2014). Stakeholder management strategies and practices during a project course. *Project Management Journal*, 45(5), 71–85.

doi:10.1002/pmj.21447

Fabricius, G., & Büttgen, M. (2015). Project managers' overconfidence: How is risk reflected in anticipated project success? *Business Research* 8(2), 239-263.

Retrieved from <http://www.springer.com>

Fiedler, F. E. (1964). A contingency model of leadership effectiveness. *Advances in Experimental Social Psychology*, 1, 149-190. doi:10.1016/S0065-2601(08)60051-9

Fiedler, F. E. (1971). Validation and extension of the contingency model of leadership effectiveness: A review of empirical findings. *Psychological Bulletin*, 76(2), 128-148. doi:10.1037/h0031454

Finlay, K. A., & Elander, J. (2016). Reflecting the transition from pain management

services to chronic pain support group attendance: An interpretative phenomenological analysis. *British Journal of Health Psychology*, *21*, 660-676. doi:10.1111/bjhp.12194

Florice, S., Michela, J. L., & Piperca, S. (2016). Complexity, uncertainty-reduction strategies, and project performance. *International Journal of Project Management*, *34*, 1360-1383. doi:10.1016/j.ijproman.2015.11.007

Flynn, R., & Hartfield, D. (2016). An evaluation of a frontline led quality improvement initiative. *Leadership in Health Services*, *29*, 402-414. doi:10.1108/LHS-11-2015-0039

Flyvbjerg, B. (2014). What you should know about megaprojects and why: An overview. *Project Management Journal*, *45*(2), 6-19. doi:10.1002/pmj.21409

Forster, S., Smith, S., Daniel, P., Binnion, A., Briggs, L., Evans, R.,... Saini, G. (2016). Optimising prescription and titration of oxygen for adult inpatients using novel silicone wristbands: Results of a pilot project at three centres. *Clinical Medicine*, *16*, 330-334. doi:10.7861/clinmedicine.16-4-330

Foss, M. J., Frederiksen, L., & Rullani, F. (2016). Problem-formulation and problem-solving in self-organized communities: How modes of communication shape project behaviors in the free open-source software community. *Strategic Management Journal*, *37*, 2589-2610. doi:10.1002/smj.2439

Foss, N. J., & Hallberg, N. L. (2014). How symmetrical assumptions advance strategic management research. *Strategic Management Journal*, *35*, 903-913. doi:10.1002/smj.2130

- Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V. Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? Operationalizing data saturation for theory-based interview studies. *Psychology and Health, 25*, 1229-1245. doi:10.1080/08870440903194015
- Fugard, A., & Potts, H. (2015). Supporting thinking on sample sizes for thematic analysis: A quantitative tool. *International Journal of Social Research Methodology, 18*, 669-684. doi:10.1080/13645579.2015.1005453
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report, 20*, 1408-1416. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Galvin, M., Gaffney, R., Corr, B., Mays, I., & Hardiman, O. (2017). From first symptoms to diagnosis of amyotrophic lateral sclerosis: Perspectives of an Irish informal caregiver cohort—a thematic analysis. *BMJ Open, 7*(3), e014985. doi:10.1136/bmjopen-2016-014985
- Garg, P., & Agarwal, D. (2014). Critical success factors for ERP implementation in a Fortis hospital: An empirical investigation. *Journal of Enterprise Information Management, 27*(4), 402-423. doi:10.1108/JEIM-06-2012-0027
- Garrety, K., McLoughlin, I., Dalley, A., Wilson, R., & Ping, Y. (2016). National electronic health record systems as 'wicked projects': The Australian experience. *Information Polity: The International Journal of Government & Democracy in the Information Age, 21*, 367-381. doi:10.3233/IP-160389
- Gibbins, J., Bhatia, R., Forbes, K., & Reid, C. M. (2014). What do patients with advanced

- incurable cancer want from the management of their pain? A qualitative study. *Palliative Medicine*, 28(1), 71-78. doi:10.1177/0269216313486310
- Gibson, S., Benson, O., & Brand, S. L. (2013). Talking about suicide: Confidentiality and anonymity in qualitative research. *Nursing Ethics*, 20(1), 18-29. doi:10.1177/0969733012452684
- Goldratt, E. (1997). *Critical chain*. Barrington, MA: North River Press Publishing Corporation.
- Goldratt, E. M., & Cox, J. (1984). *The goal: A process of ongoing improvement*. Great Barrington, MA: North River Press Publishing Corporation.
- Grady, C. (2015). Enduring and emerging challenges of informed consent. *New England Journal of Medicine*, 372, 855-862. doi:10.1056/NEJMra1411250
- Graneheim, U. H., Johansson, A., & Lindgren, B. M. (2014). Family caregivers' experiences of relinquishing the care of a person with dementia to a nursing home: Insights from a meta-ethnographic study. *Scandinavian Journal of Caring Sciences*, 28, 215-224. doi:10.1111/scs.12046
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105-112. doi:10.1016/j.nedt.2003.10.001
- Grant, A. (2016). How to build a culture of originality: Anyone can innovate if given the opportunity and the support. *Harvard Business Review*, 94(3), 86-94. Retrieved from <https://hbr.org>
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications

for strategy formulation. *California Management Review*, 33(3), 114-135.

doi:10.2307/41166664

Grossoehme, D. H. (2014). Overview of qualitative research. *Journal of Health Care*

Chaplaincy, 20(3), 109-122. doi:10.1080/08854726.2014.925660

Guédon, A. P., Wauben, L. L., de Korne, D. F., Overvelde, M., Dankelman, J., & van den

Dobbelsteen, J. J. (2015). A RFID specific participatory design approach to

support design and implementation of real-time location systems in the operating

room. *Journal of Medical Systems*, 39(1), 1-10. doi:/10.1007/s10916-014-0168-0

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An

experiment with data saturation and variability. *Field Methods*, 18(1), 59-82.

doi:10.1177/1525822X05279903

Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and

qualitative results in health science mixed methods research through joint

displays. *The Annals of Family Medicine*, 13, 554-561. doi:10.1370/afm.1865

Gupta, V. K., & Batra, S. (2016). Entrepreneurial orientation and firm performance in

Indian SMEs: Universal and contingency perspectives. *International Small*

Business Journal, 34, 660-682. doi:10.1177/0266242615577708

Harrington, H. J., & Frank, V. (2015). Cultural change management. *International*

Journal of Innovation Science, 7(1), 55-74. doi:10.1260/1757-2223.7.1.55

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

interview. *International Journal of Research & Method in Education*, 38(1), 23-

38. doi:10.1080/1743727x.2014.914487

- Hassan, M. M., Bashir, S., & Abbas, S. M. (2017). The impact of project managers' personality on project success in NGOs: The mediating role of transformational leadership. *Project Management Journal*, *48*(2), 74-87. Retrieved from <https://www.pmi.org/learning/publications/project-management-journal>
- Hastings, C. S. L., & Salkind, N. J. (2013). *Encyclopedia of Research Design*. Thousand Oaks, CA: Sage Publications.
- Health and Human Services (2016). *The Belmont Report*. Retrieved from <https://www.hhs.gov>
- Heinrich, S., Uribe, F. L., Wübbeler, M., Hoffmann, W., & Roes, M. (2016). Knowledge evaluation in dementia care networks: A mixed-methods analysis of knowledge evaluation strategies and the success of informing family caregivers about dementia support services. *International Journal of Mental Health Systems*, *10*(1), 69-79. doi:10.1186/s13033-016-0100-8
- Hermano, V., & Martín-Cruz, N. (2016). The role of top management involvement in firms performing projects: A dynamic capabilities approach. *Journal of Business Research*, *69*, 3447-3458. doi:10.1016/j.jbusres.2016.01.041
- Hessler, P. (2016). Managing small and medium-sized capital projects. *Chemical Engineering*, *123*(2), 54-57. Retrieved from <http://www.chemengonline.com/>
- Hjelmbrekke, H., Hansen, G. K., & Lohne, J. (2015). A motherless child—Why do construction projects fail. *Procedia Economics and Finance*, *21*, 72-79. doi:10.1016/S2212-5671(15)00152-5
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-

study research. *Nurse Researcher*, 20(4), 12-17.

doi:10.7748/nr2013.03.20.4.12.e326

Houghton, C., Murphy, K., Meehan, B., Thomas, J., Brooker, D., & Casey, D. (2017).

From screening to synthesis: Using NVivo to enhance transparency in qualitative evidence synthesis. *Journal of Clinical Nursing*, 26, 873-881.

doi:10.1111/jocn.13443

Hussain, A., & Mkpojiogu, E. O. (2016, August). Requirements: Towards an

understanding on why software projects fail. In F. A. A. Nifa, M. N. M. Nawi, & A. Hussain (Eds.), *AIP Conference Proceedings* (pp. 020046-1-020046-5). AIP

Publishing. doi:10.1063/1.4960886

Hutchinson-Krupat, J., & Chao, R. O. (2014). Tolerance for failure and incentives for

collaborative innovation. *Production & Operations Management*, 23, 1265-1285.

doi:10.1111/poms.12092

Hyväri, I. (2016). Roles of top management and organizational project management in

the effective company strategy implementation. *Procedia - Social and Behavioral Sciences*, 226, 108-115. doi:10.1016/j.sbspro.2016.06.168

Iacob, S. (2013). Cause and effect in promoting a project. *Annals of the University of*

Petrosani Economics, 13(2), 99-108. Retrieved from

<http://www.upet.ro/annals/economics/>

Iqbal, M., Ali, S., Yue, T., & Briand, L. (2015). Applying UML/MARTE on industrial

projects: Challenges, experiences, and guidelines. *Software & Systems*

Modeling, 14, 1367-1385. doi:10.1007/s10270-014-0405-5

- Jamieson, A., & Morris, P. W. G. (2007). Moving from corporate strategy to project strategy. In P. W. Morris, & J. K. Pinto (Eds.), *Project Program & Portfolio Management* (pp. 34-62). Hoboken, NJ: John Wiley & Sons.
- Jensen, K. R. (2015). Global innovation and cross-cultural collaboration: The influence of organizational mechanisms. *Management International, 19*, 101-116. Retrieved from <http://managementinternational.ca/>
- Jeppesen, J. (2016). From interview to transcript to story: Elucidating the construction of journalistic narrative as qualitative research. *The Qualitative Report, 21*, 1636-1650. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Jerbrant, A., & Gustavsson, T. K. (2013). Managing project portfolios: Balancing flexibility and structure by improvising. *International Journal of Managing Projects in Business, 6*(1), 152-172. doi:10.1108/17538371311291071
- Jones, C. M., Cushman, J. T., Lerner, E. B., Fisher, S. G., Seplaki, C. L., Veazie, P. J., ... & Shah, M. N. (2016). Prehospital trauma triage decision-making: A model of what happens between the 9-1-1 call and the hospital. *Prehospital Emergency Care, 20*(1), 6-14. doi:10.3109/10903127.2015.1025157
- Joslin, R., & Müller, R. (2015). Relationships between a project management methodology and project success in different project governance contexts. *International Journal of Project Management, 33*, 1377-1392. doi:10.1016/j.ijproman.2015.03.005
- Joslin, R., & Müller, R. (2016). The relationship between project governance and project success. *International Journal of Project Management, 34*, 613-626.

doi:10.1016/j.ijproman.2016.01.008

- Kapu, A. N., Wheeler, A. P., & Lee, B. (2014). Addition of acute care nurse practitioners to medical and surgical rapid response teams: A pilot project. *Critical Care Nurse, 34*(1), 51-59. doi:10.4037/ccn2014847
- Karol, R. A. (2015). Leadership in the context of corporate entrepreneurship. *Journal of Leadership Studies, 8*(4), 30-34. doi:10.1002/jls.21350
- Kauffman, S. A. (1993). *The origins of order: Self organization and selection in evolution*. New York, NY: Oxford University Press.
- Khattak, M. S., Mustafa, U., & Shah, S. S. (2016). Mapping project management competencies with different complexities for improving performance. *Journal of Managerial Sciences, 10*(2), 205-217. Retrieved from <http://www.qurtuba.edu.pk/index.php/research/research-journals/journal-of-managerial-sciences>
- Ke, H., Cui, Z., Govindan, K., & Zavadskas, E. K. (2015). The impact of contractual governance and trust on EPC projects in construction supply chain performance. *Inzinerine Ekonomika-Engineering Economics, 26*, 349–363. doi:10.5755/j01.ee.26.4.9843
- Kermanshachi, S., Dao, B., Shane, J., & Anderson, S. (2016). Project complexity indicators and management strategies—A Delphi Study. *Procedia Engineering, 145*, 587-594. doi:10.1016/j.proeng.2016.04.048
- Khalema, L. S., Van Waveren, C. C., & Chan, K. Y. (2015). The relationship between project management office maturity and organizational project management

maturity: An empirical study of the South African government infrastructure departments. *South African Journal of Industrial Engineering*, 26(3), 12-26.

Retrieved from <http://sajie.journals.ac.za/pub/index>

Khameneh, A., Taheri, A., & Ershadi, M. (2016). Offering a framework for evaluating the performance of project risk management system. *Procedia - Social and Behavioral Sciences*, 226, 82-90. doi:10.1016/j.sbspro.2016.06.165

Killen, C. P., & Hunt, R. A. (2013). Robust project portfolio management: Capability evolution and maturity. *International Journal of Managing Projects in Business*, 6(1), 131-151. doi:10.1108/17538371311291062

Klein, L. (2016). Towards a practice of systemic change - Acknowledging social complexity in project management. *Systems Research and Behavioral Science*, 33, 651-661. doi:10.1002/sres.2428

Koh, A., & Crawford, L. (2013). Portfolio management: The Australian experience. *Project Management Journal*, 43(6), 33-42. doi:10.1002/pmj.21300

Koskela, L., & Howell, G. (2008). The underlying theory of project management is obsolete. *IEEE Engineering Management Review*, 36(2), 22-34.

doi:10.1109/EMR.2008.4534317

Lai, X. D., Wu, G. D., Shi, J. G., Wang, H. M., & Kong, Q. S. (2015). Project value-adding optimization of project-based supply chain under dynamic reputation incentives. *International Journal of Simulation Modelling*, 14(1), 121-133.

doi:10.2507/IJSIMM14(1)CO1

Lam, C. K., Walter, F., & Huang, X. (2017). Supervisors' emotional exhaustion and

abusive supervision: The moderating roles of perceived subordinate performance and supervisor self-monitoring. *Journal of Organizational Behavior*, 38, 1151-1166. doi:10.1002/job.2193

Lehna, C., Twyman, S., Fahey, E., Coty, M., Williams, J., Scrivener, D., & Wishnia, G. (2015). "Worried about them when we left": A mixed-methods essay. *The Qualitative Report*, 20, 49-62. Retrieved from <http://nsuworks.nova.edu/tqr/>

Leybourne, S. A., & Sainter, P. (2013). Advancing project management: Authenticating the shift from process to "nuanced" project-based management in the ambidextrous organization. *Project Management Journal*, 43(6), 5-15. doi:10.1002/pmj.21306

Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Evaluation*, 1986(30), 73-84. doi:10.1002/ev.142

Lincoln, Y. S., Guba, E. G., & Pilotta, J. J. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.

Liu, J. Y., Zou, P. X. W., & Gong, W. (2013). Managing project risk at the enterprise level: Exploratory case studies in China. *Journal of Construction Engineering & Management*, 139, 1268-1274. doi:10.1061/(ASCE)CO.1943-7862.0000717

Longenecker, C. O., & Longenecker, P. D. (2014). Why hospital improvement efforts fail: A view from the front line. *Journal of Healthcare Management*, 59(2), 147-159. Retrieved from https://ache.org/pubs/jhm/jhm_index.cfm

Madsen, A. K. (2013). Virtual acts of balance: Virtual technologies of knowledge

management as co-produced by social intentions and technical limitations.

Electronic Journal of E-Government, 11, 183-197. Retrieved from

<http://www.ejeg.com>

Maon, F., & Lindgreen, A. (2015). Reclaiming the child left behind: The case for corporate cultural responsibility. *Journal of Business Ethics*, 130, 755-766.

doi:10.1007/s10551-014-2112-0

Mappilakkandy, R. K., Krauze, S., & Khan, I. (2014). Teaching comprehensive geriatric assessment to medical students via modified problem based learning—A pilot project in Northampton General Hospital. *Age and Ageing*, 43(supplement 1), i26.

doi:10.1093/ageing/afu041.2

Maqbool, R., Ye, S., Manzoor, N., & Rashid, Y. (2017). The impact of emotional intelligence, project managers' competencies, and transformational leadership on project success: An empirical perspective. *Project Management Journal*, 48(3),

58-75. Retrieved from <https://www.pmi.org/learning/publications/project-management-journal>

Marion, R., Christiansen, J., Klar, H. W., Schreiber, C., & Erdener, M. A. (2016).

Informal leadership, interaction, cliques and productive capacity in organizations: A collectivist analysis. *The Leadership Quarterly*, 27(2), 242-260.

doi:10.1016/j.leaqua.2016.01.003

Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research? A review of qualitative interviews in IS research. *Journal of Computer Information Systems*, 54, 11-22. doi:10.1080/08874417.2013.11645667

- Marshall, C., & Rossman, G. (2016). *Designing qualitative research*. Thousand Oaks, CA: Sage.
- Mastrogiacomo, S., Missonier, S., & Bonazzi, R. (2014). Talk before it's too late: Reconsidering the role of conversation in information systems project management. *Journal of Management Information Systems*, *31*(1), 44-78. doi:10.2753/MIS0742-1222310103
- Mathur, G., Jugdev, K., & Fung, T. S. (2014). The relationship between project management process characteristics and performance outcomes. *Management Research Review*, *37*, 990-1015. doi:10.1108/MRR-05-2013-0112
- McAlearney, A. S., Hefner, J. L., Sieck, C. J., & Huerta, T. R. (2015). The journey through grief: Insights from a qualitative study of electronic health record implementation. *Health Services Research*, *50*, 462-488. doi:10.1111/1475-6773.12227
- McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, *30*, 537-542. doi:10.1177/0267659114559116
- McDermid, F., Peters, K., Jackson, D., & Daly, J. (2014). Conducting qualitative research in the context of pre-existing peer and collegial relationships. *Nurse Researcher*, *21*(5), 28-33. doi:10.7748/nr.21.5.28.e1232
- McMullen, C. K., Macey, T. A., Pope, J., Gugerty, B., Slot, M., Lundeen, P.,...Carlson, N. (2015). Effect of computerized prescriber order entry on pharmacy: Experience of one health system. *American Journal of Health-System Pharmacy: Official*

Journal of the American Society of Health-System Pharmacists, 72(2), 133-142.

doi:10.2146/ajhp140106

Mehta, S. J., & Ahmad, N. A. (2016). Aligning quality with the academic mission: A quality improvement and delivery science program in gastroenterology.

Gastroenterology, 150, 543-546. doi:10.1053/j.gastro.2016.01.018

Mesquida, A., & Mas, A. (2014). A project management improvement program

according to ISO/IEC 29110 and PMBOK®. *Journal of Software: Evolution & Process*, 26, 846-854. doi:10.1002/smr.1665

Miller, A., Balapuria, M., & Mohamed-Sesay, M. M. (2015). Facilitating project success

by eliminating interpersonal conflicts. *Journal of Information Technology &*

Economic Development, 6(1), 41-57. Retrieved from [http://www.gsmi-](http://www.gsmi-ijgb.com/Pages/Journals.aspx)

[ijgb.com/Pages/Journals.aspx](http://www.gsmi-ijgb.com/Pages/Journals.aspx)

Miterev, M., Engwall, M., & Jerbrant, A. (2016). Exploring program management

competences for various program types. *International Journal of Project*

Management, 34, 545-557. doi:10.1016/j.ijproman.2015.07.006

Molineux, J. (2013). Enabling organizational cultural change using systemic strategic

human resource management: A longitudinal case study. *International Journal of Human Resource Management*, 24, 1588-1612.

doi:10.1080/09585192.2012.723022

Moore, C. B., Payne, G. T., Autry, C. W., & Griffis, S. E. (2016). Project complexity and bonding social capital in network organizations. *Group & Organization*

Management, 41, 1-35. doi:10.1177/1059601116650556

- Morgan, A. U., Grande, D. T., Carter, T., Long, J. A., & Kangovi, S. (2016). Penn Center for Community Health Workers: Step-by-step approach to sustain an evidence-based community health worker intervention at an academic medical center. *American Journal of Public Health, 106*, 1958-1960.
doi:10.2105/AJPH.2016.303366
- Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research, 25*, 1212-1222.
doi:10.1177/1049732315588501
- Mossolly, M. (2015). Global projects: A conceptual review on execution attitude in multinational corporations. *Procedia Social and Behavioral Sciences, 194*, 125-133. doi:10.1016/j.sbspro.2015.06.125
- Müller, R., Glückler, J., & Aubry, M. (2013). A relational typology of project management offices. *Project Management Journal, 44*(1), 59-76.
doi:10.1002/pmj.21321
- Munn, Z., Porritt, K., Lockwood, C., Aromataris, E., & Pearson, A. (2014). Establishing confidence in the output of qualitative research synthesis: The ConQual approach. *BMC Medical Research Methodology, 14*(1), 108-114.
doi:10.1186/1471-2288-14-108
- Netland, T. H. (2016). Critical success factors for implementing lean production: The effect of contingencies. *International Journal of Production Research, 54*, 2433-2448. doi:10.1080/00207543.2015.1096976
- Nickson, L., & Henriksen, R. (2014). Leaders and recruiters from the next generation: A

- phenomenological study. *Qualitative Report*, 19, 1-13. Retrieved from <http://www.nsuworks.nova.edu/tqr/>
- Nissen, L. B. (2014). The power of organizational readiness to boost success with the 2008 EPAS in social work education. *Journal of Social Work Education*, 50(1), 5-18. doi:10.1080/10437797.2014.856223
- Olaniran, O. J. (2017). Barriers to tacit knowledge sharing in geographically dispersed project teams in oil and gas projects. *Project Management Journal*, 48(3), 41-57. Retrieved from <https://www.pmi.org/learning/publications/project-management-journal>
- Oostveen, C. J., Ubbink, D. T., Mens, M. A., Pompe, E. A., & Vermeulen, H. (2016). Pre-implementation studies of a workforce planning tool for nurse staffing and human resource management in university hospitals. *Journal of Nursing Management*, 24(2), 184-191. doi:10.1111/jonm.12297
- Otley, D. (2016). The contingency theory of management accounting and control: 1980–2014. *Management Accounting Research*, 31, 45-62. doi:10.1016/j.mar.2016.02.001
- Owen, G. (2014). Qualitative methods in higher education policy analysis: Using interviews and document analysis. *Qualitative Report*, 19, 1-19. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Padalkar, M., & Gopinath, S. (2016). Are complexity and uncertainty distinct concepts in project management? A taxonomical examination from literature. *International Journal of Project Management*, 34, 688-700.

doi:10.1016/j.ijproman.2016.02.009

- Padgett, J., Gossett, K., Mayer, R., Chien, W., & Turner, F. (2017). Improving patient safety through high reliability organizations. *The Qualitative Report*, 22, 410-425. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health*, 42, 533-544. doi:10.1007/s10488-013-0528-y
- Parker, D. W., Parsons, N., & Isharyanto, F. (2015). Inclusion of strategic management theories to project management. *International Journal of Managing Projects in Business*, 8, 552-573. doi:10.1108/ijmpb-11-2014-0079
- Peters, K., & Halcomb, E. (2015). Interviews in qualitative research. *Nurse Researcher*, 22(4), 6-7. doi:10.7748/nr.22.4.6.s2
- Polit, D. F., & Beck, C. T. (2012). *Nursing research: Generating and assessing evidence for nursing practice*. Philadelphia, PA: Lippincott Williams and Wilkins.
- Popescu, A. D., Borca, C., Fistis, G., & Draghici, A. (2014). Cultural diversity and differences in cross-cultural project teams. *Procedia Technology*, 16, 525-531. doi:10.1016/j.protcy.2014.10.120
- Project Management Institute (2013). *A guide to the project management body of knowledge (PMBOK® Guide)* (5th ed.). Atlanta, GA: Project Management Institute.
- Qianqian, J., Lieyun, D., & Skibniewski, M. J. (2017). Optimization strategies to

eliminate interface conflicts in complex supply chains of construction projects. *Journal of Civil Engineering & Management*, 23, 712-726.
doi:10.3846/13923730.2016.1232305

Ramazani, J., & Jergeas, G. (2015). Project managers and the journey from good to great: The benefits of investment in project management training and education. *International Journal of Project Management*, 33, 41-52.
doi:10.1016/j.ijproman.2014.03.012

Ranney, M. L., Meisel, Z. F., Choo, E. K., Garro, A. C., Sasson, C., & Morrow Guthrie, K. (2015). Interview-based qualitative research in emergency care part II: Data collection, analysis and results reporting. *Academic Emergency Medicine*, 22, 1103-1112. doi:10.1111/acem.12735

Reed, J. E., & Card, A. J. (2015). The problem with plan-do-study-act cycles. *BMJ Quality & Safety*, 25(3), 147-152. doi:10.1136/bmjqs-2015-005076

Rhodes, L., & Dawson, R. (2013). Lessons learned from lessons learned. *Knowledge & Process Management*, 20(3), 154-160. doi:10.1002/kpm.1415

Riazi, A. M., & Candlin, C. N. (2014). Mixed-methods research in language teaching and learning: Opportunities, issues and challenges. *Language Teaching*, 47(2), 135-173. doi:10.1017/S0261444813000505

Riordan, F., Papoutsis, C., Reed, J. E., Marston, C., Bell, D., & Majeed, A. (2015). Patient and public attitudes towards informed consent models and levels of awareness of electronic health records in the UK. *International Journal of Medical Informatics*, 84(4), 237-247. doi:10.1016/j.ijmedinf.2015.01.008

- Rosenthal, M. (2016). Qualitative research methods: Why, when, and how to conduct interviews and focus groups in pharmacy research. *Currents in Pharmacy Teaching and Learning*, 8, 509-516. doi:10.1016/j.cptl.2016.03.021
- Rovai, A. P., Baker, J. D., & Ponton, M. K. (2014). *Social science research design and statistics: A practitioner's guide to research methods and IBS SBSS analysis* (2nd ed.). Chesapeake, VA: Watertree Press LLC.
- Rowley, J. (2014). Designing and using research questionnaires. *Management Research Review*, 37(3), 260-271. doi:10.1108/MRR-02-2013-0027
- Sambhava, K., Nautiyal, P., & Jain, J. (2016). Model based phenomenological and experimental investigation of nanoindentation creep in pure Mg and AZ61 alloy. *Materials & Design*, 105, 142-151. doi:10.1016/j.matdes.2016.05.036
- Samset, K., & Volden, G. H. (2016). Front-end definition of projects: Ten paradoxes and some reflections regarding project management and project governance. *International Journal of Project Management*, 34, 297-313. doi:10.1016/j.ijproman.2015.01.014
- Sánchez, M. A., & Schneider, D. E. (2014). Project management, strategic management and sustainable development: A review of the literature. *Revista Metropolitana De Sustentabilidade*, 4(3), 28-49. Retrieved from <http://www.revistaseletronicas.fmu.br/>
- Sarmiento, V. P., Gysels, M., Higginson, I. J., & Gomes, B. (2017). Home palliative care works: But how? A meta-ethnography of the experiences of patients and family caregivers. *BMJ Supportive & Palliative Care*. Advance online publication.

doi:10.1136/bmjspcare-2016-001141.

Sauser, B. J., Reilly, R. R., & Shenhar, A. J. (2009). Why projects fail? How contingency theory can provide new insights. A comparative analysis of NASA's Mars Climate Orbiter loss. *International Journal of Project Management*, 27, 665-679. doi:10.1016/j.ijproman.2009.01.004

Scholte, M., van Dulmen, S. A., Neeleman-Van der Steen, C. M., van der Wees, P. J., Nijhuis-van der Sanden, M. G., & Braspenning, J. (2016). Data extraction from electronic health records (EHRs) for quality measurement of the physical therapy process: Comparison between EHR data and survey data. *BMC Medical Informatics & Decision Making*, 16, 141-152. doi:10.1186/s12911-016-0382-4

Schoonoven, C. (1981). Problems with contingency theory: Testing assumptions hidden within the language. *Administrative Science Quarterly*, 26, 349-377. doi:10.2307/2392512

Schuller, K. A., Kash, B. A., & Gamm, L. D. (2015). Studer Group®'s evidence-based leadership initiatives: Comparing success and sustainability in two health systems. *Journal of Health Organization and Management*, 29, 684-700. doi:10.1108/JHOM-10-2013-0211

Senescu, R. R., Aranda-Mena, G., & Haymaker, J. R. (2013). Relationships between project complexity and communication. *Journal of Management in Engineering*, 29(2), 183-197. doi:10.1061/(ASCE)ME.1943-5479.0000121

Serra, C. E. M., & Kunc, M. (2015). Benefits realisation management and its influence on project success and on the execution of business strategies. *International Journal*

of Project Management, 33, 53-66. doi:10.1016/j.ijproman.2014.03.011

Shenhar, A. J. (2001). One size does not fit all projects: Exploring classical contingency domains. *Management Science*, 47, 394–414. doi:10.1287/mnsc.47.3.394.9772

Şimşit, Z. T., Günay, N. S., & Vayvay, Ö. (2014). Theory of constraints: A literature review. *Procedia-Social and Behavioral Sciences*, 150, 930-936.

doi:10.1016/j.sbspro.2014.09.104

Skoien, W., Page, K., Parsonage, W., Ashover, S., Milburn, T., & Cullen, L. (2016). Use of the theoretical domains framework to evaluate factors driving successful implementation of the accelerated chest pain risk evaluation (ACRE)

project. *Implementation Science*, 11, 1-11. doi:10.1186/s13012-016-0500-9

Smith, K. A., Macias, K., Bui, K., & Betz, C. L. (2015). Brief report: Adolescents' reasons for participating in a health care transition intervention study. *Journal of Pediatric Nursing*, 30(5), e165-e171. doi:10.1016/j.pedn.2015.05.007

Soilkki, K. K., Cassim, N., & Karodia, A. M. (2014). An evaluation of the factors influencing the performance of registered nurses at the national referral hospital in Namibia. *Australian Journal of Business and Management Research*, 4(2), 47-62.

Retrieved from <http://www.ajbmr.com>

Stanciu, A. C., Condrea, E., & Zamfir, C. (2016). The importance of communication in quality management. *Ovidius University Annals, Economic Sciences Series*, 16, 393-396. doi:10.1016/j.sbspro.2014.04.127

Stanley, R., & Uden, L. (2013). Why projects fail, from the perspective of service science. In L. Uden, F. Herrera, J. Bajo Pérez, J. Corchado Rodríguez (Eds.), *7th*

International Conference on Knowledge Management in Organizations: Service and Cloud Computing. Advances in Intelligent Systems and Computing, 172 (pp. 421-429). doi:10.1007/978-3-642-30867-3_38

- Stewart, H., Gapp, R., & Harwood, I. (2017). Exploring the alchemy of qualitative management research: Seeking trustworthiness, credibility and rigor through crystallization. *The Qualitative Report, 22*(1), 1-19. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Stoffers, J., & Mordant-Dols, A., (2015). Transformational leadership and professionals' willingness to change: A multiple case study in project management organisations. *Human Resource Management Research, 5*(2), 40-46. Retrieved from <http://journal.sapub.org/hrmr>
- Stokke, R. (2016). The personal emergency response system as a technology innovation in primary health care services: An integrative review. *Journal of Medical Internet Research, 18*(7), e187-e201. doi:10.2196/jmir.5727
- Tabassi, A. A., Roufechaei, K. M., Abu Bakar, A. H., & Yusof, N. (2017). Linking team condition and team performance: A transformational leadership approach. *Project Management Journal, 48*(2), 22-38. Retrieved from <https://www.pmi.org/learning/publications/project-management-journal>
- Taminiau, Y., & Wiersma, A. (2016). The process of trust creation between business partners at the golf course: A long-term process. *International Journal of Strategic Business Alliances, 5*, 245-265. doi:10.1504/IJSBA.2016.083329

- Tappin, D., Bauld, L., Purves, D., Boyd, K., Sinclair, L., MacAskill, S.,...Tannahill, C. (2015). Financial incentives for smoking cessation in pregnancy: Randomised controlled trial. *BMJ*, *350*, h134-h146. doi:10.1136/bmj.h134
- Tavakol, M., & Sandars, J. (2014). Quantitative and qualitative methods in medical education research: AMEE Guide No 90: Part II. *Medical Teacher*, *36*, 838-848. doi:10.3109/0142159X.2014.915297
- Teller, J., Kock, A., & Gemünden, H. G. (2014). Risk management in project portfolios is more than managing project risks: A contingency perspective on risk management. *Project Management Journal*, *45*(4), 67-80. doi:10.1002/pmj.21431
- Thamhain, H. (2013). Managing risks in complex projects. *Project Management Journal*, *44*(2), 20-35. doi:10.1002/pmj.21325
- TranscribeMe. (2017). *Transcription for research*. Retrieved April 5, 2017 from <http://transcribeme.com/transcription-for-research>
- Trompenaars, F., & Hampden-Turner, C. (2012). *Riding the waves of culture: Understanding diversity in global business*. New York, NY: McGraw Hill.
- Turner, T. L., Balmer, D. F., & Coverdale, J. H. (2013). Methodologies and study designs relevant to medical education research. *International Review of Psychiatry*, *25*, 301-310. doi:10.3109/09540261.2013.790310
- Uhl-Bien, M., & Arena, M. (2017). Complexity leadership: Enabling people and organizations for adaptability. *Organizational Dynamics*, *41*(1), 9-20. doi:10.1016/j.orgdyn.2016.12.001

- Unger, B. N., Rank, J., & Gemünden, H. G. (2015). Preparedness for the future in project portfolio management: The roles of proactiveness, riskiness, and willing to cannibalize. *International Journal of Project Management*, *33*, 1730-1743.
doi:10.1016/j.ijproman.2015.08.002
- Urueña, A., Hidalgo, A., & Arenas, A. E. (2016). Identifying capabilities in innovation projects: Evidences from eHealth. *Journal of Business Research*, *69*, 4843-4848.
doi:10.1016/j.jbusres.2016.04.041
- Valčić, S. B., Dimitrić, M., & Dalsaso, M. (2016). Effective Project Management Tools for Modern Organizational Structures. *Annals of Maritime Studies / Pomorski Zbornik*, *51*(1), 131-145. Retrieved from <http://hrcak.srce.hr/pomorski-zbornik>
- Vainio, A. (2013). Beyond research ethics: Anonymity as ‘ontology’, ‘analysis’ and ‘independence’. *Qualitative Research*, *13*, 685-698.
doi:10.1177/1468794112459669
- Valentine, S., Nam, S., Hollingworth, D., & Hall, C. (2014). Ethical context and ethical decision making: Examination of an alternative statistical approach for identifying variable relationships. *Journal of Business Ethics*, *124*, 509-526.
doi:10.1007/s10551-013-1879-8
- Van der Hoorn, B., & Whitty, S. J. (2017). The praxis of ‘alignment seeking’ in project work. *International Journal of Project Management*, *35*, 978-993.
doi:10.1016/j.ijproman.2017.04.011

- Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017). Shedding the cobra effect: Problematizing thematic emergence, triangulation, saturation and member checking. *Medical Education*, *51*(1), 40-50. doi:10.1111/medu.13124
- Volden, G. H., & Samset, K. (2017). Governance of major public investment projects: Principles and practices in six countries. *Project Management Journal*, *48*(3), 90-108. Retrieved from <https://www.pmi.org/learning/publications/project-management-journal>
- Wang, M. (2016). The impact of cultural values on Chinese students in American higher education. *The Qualitative Report*, *21*, 611-628. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Weill, P., & Olson, M. H. (1989). An assessment of the contingency theory of management information systems. *Journal of Management Information Systems*, *6*(1), 59-85. doi:10.1080/07421222.1989.11517849
- West, R., Usher, K., Foster, K., & Stewart, L. (2014). Academic staff perceptions of factors underlying program completion by Australian indigenous nursing students. *The Qualitative Report*, *19*, 1-19. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Widforss, G., & Rosqvist, M. (2015). The project office as project management support in complex environments. *Procedia Computer Science*, *64*, 764-770. doi:10.1016/j.procs.2015.08.626

- Wilson, A. D., Onwuegbuzie, A. J., & Manning, L. P. (2016). Using paired depth interviews to collect qualitative data. *The Qualitative Report, 21*, 1549-1573. Retrieved from <http://nsuworks.nova.edu/tqr/>
- Woods, M., Paulus, T., Atkins, D. P., & Macklin, R. (2016). Advancing qualitative research using qualitative data analysis software (QDAS)? Reviewing potential versus practice in published studies using ATLAS.ti and NVivo, 1994–2013. *Social Science Computer Review, 34*, 597-617. doi:10.1177/0894439315596311
- Wyatt, J. C., & Sullivan, F. (2005). ABC of health informatics: eHealth and the future: Promise or peril? *BMJ, 331*, 1391-1393. doi:10.1136/bmj.331.7529.1391
- Wysocki, R. K. (2014). *Effective project management: Traditional, agile, extreme* (7th ed.). Indianapolis, IN: John Wiley & Sons, Inc.
- Yang, K., Zhao, R., & Lan, Y. (2016). Incentive contract design in project management with serial tasks and uncertain completion times. *Engineering Optimization, 48*, 629-651. doi:10.1080/0305215x.2015.1031658
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education, 48*, 311-325, doi:10.1111/ejed.12014
- Yin, R. K. (2013). Validity and generalization in future case study evaluations. *Evaluation, 19*, 321-332. doi:10.1177/1356389013497081
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage Publications, Inc.

- Yin, R. K. (2015). *Qualitative research from start to finish* (2nd ed.). New York, NY: Guilford Press.
- Yongjie, Y., Mikton, C., Wilder, K., & Gassoumis, Z. (2016). A research protocol to guide the systematic review and meta-analysis of elder abuse prevalence studies. *Canadian Journal on Aging/La Revue canadienne du vieillissement*, *36*(2), 256-265. doi:10.1017/S0714980817000137
- Yu, T., Shen, G. Q., Shi, Q., Lai, X., Li, C. Z., & Xu, K. (2017). Managing social risks at the housing demolition stage of urban redevelopment projects: A stakeholder-oriented study using social network analysis. *International Journal of Project Management*, *35*, 925-941. doi:10.1016/j.ijproman.2017.04.004
- Zamawe, F. C. (2015). The implication of using NVivo software in qualitative data analysis: Evidence-based reflections. *Malawi Medical Journal*, *27*(1), 13-15. doi:10.4314/mmj.v27i1.4
- Zhu, J., & Mostafavi, A. (2017). Discovering complexity and emergent properties in project systems: A new approach to understanding project performance. *International Journal of Project Management*, *35*, 1-12. doi:10.1016/j.ijproman.2016.10.004
- Zuo, J., Zillante, G., Zhao, Z. Y., & Xia, B. (2014). Does project culture matter? A comparative study of two major hospital projects. *Facilities*, *32*, 801-824. doi:10.1108/F-02-2013-0014
- Zwikael, O., & Smyrk, J. (2015). Project governance: Balancing control and trust in dealing with risk. *International Journal of Project Management*, *33*, 852-862.

doi:10.1016/j.ijproman.2014.10.012

Appendix A: Interview Protocol

Section	Purpose
Introduction	I will introduce myself, review informed consent, and allow participants to ask their questions.
Ice breaker question, what has been the most significant or memorable project experience you remember?	This is to minimize participants' anxiety, help them acclimate to the inquiry process, and to develop rapport (Ranney et al., 2015).
<p>Interview Questions:</p> <ol style="list-style-type: none"> 1. What strategies do you use to manage the relationship dynamics, engagement, and support among the project stakeholders? 2. What strategies do you use to handle project attributes such as project scope, timelines, budgets, risk, quality, and complexity? 3. What leadership strategies do you use to successfully manage the project? 4. What strategies do you use to gain support and resources from your organization provide to ensure project success? 5. How do you leverage or mitigate organizational characteristics, such as governance, structure, systems, incentives, and cultural factors to ensure your successful management of projects? 6. What other strategies are critical for project success in health care? 7. What other information would you like to share about the way you achieve project success? 	<p>To uncover participants' perspectives to answer the primary research question, what strategies leaders use to manage projects successfully in health care?</p> <p>Some possible follow-up questions may be to ask participants to give a specific example or elaborate upon context to help better understand their responses.</p>
Summary and conclusion	Allow participants to clarify or refine responses, and bring the interview to a formal close.