

EFFECTS OF PROJECT MANAGERS USE

EFFECTS OF PROJECT MANAGERS USE OF HUMAN RESOURCE MANAGEMENT
TOOLS AND TECHNIQUES TO PLAN, ESTIMATE, ACQUIRE, DEVELOP, MANAGE,
AND CONTROL PROJECT TEAMS WITHIN ACQUISITION MISSION-ORIENTED
ORGANIZATIONS OF THE UNITED STATES DEPARTMENT OF THE NAVY

by

Gregory A. Bouton

Dissertation

Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Liberty University, School of Business

April 2021

Abstract

Project management (PM) has long been recognized by the United States Department of the Navy (DON) as a necessary function to manage the development of Naval assets. The DON also recognizes the utility of human resources management (HRM) tools and techniques to support the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON. However, research indicates that there is ineffective use of HRM tools and techniques by project managers which can result in the potential for the integrity of the processes of a DON commissioned project to be adversely impacted. Therefore, this study examined the perspectives of project managers, project team members, and HRM practitioners within acquisition mission-oriented organizations of the DON in order to gain an understanding why ineffective use of HRM tools and techniques to plan, estimate, acquire, develop, manage, and control DON project teams. A multi-site qualitative case study research method and design was used to conduct this study. During this research personal observations were made; unclassified public documents were reviewed; and open-ended interviews were conducted with DON acquisition mission-oriented organizational project managers and supervisory HR specialists. The research resulted in findings specific to project manager and HR practitioner relationships, project manager and HR practitioner teamwork, and the acquisition and utilization of resources to enable productive project manager and HR practitioner relationships. During this research inferences for findings were discovered; as well, recommendations for action and continued research were posited by the researcher. This case study closes gaps in the DON PM and HRM bodies of knowledge, as well as expands the scope of understanding for publicly revered PM and HRM bodies of knowledge.

Keywords: Acquisition workforce, HRM, PM, PRM, United States Navy

EFFECTS OF PROJECT MANAGERS USE OF HUMAN RESOURCE MANAGEMENT
TOOLS AND TECHNIQUES TO PLAN, ESTIMATE, ACQUIRE, DEVELOP, MANAGE,
AND CONTROL PROJECT TEAMS WITHIN ACQUISITION MISSION-ORIENTED
ORGANIZATIONS OF THE UNITED STATES DEPARTMENT OF THE NAVY

by

Gregory A. Bouton

Dissertation

Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Liberty University, School of Business

April 2021

Approvals

Gregory A. Bouton, Doctoral Candidate

Date

Dr. John E. Johnson, Dissertation Chair

Date

Dr. Christopher Hicks, Committee Member

Date

Dr. Edward M. Moore, Director of Doctoral Programs

Date

Dedication

I dedicate this research to the men and women who selflessly serve the people of our great nation to secure our livelihood for generations to come. Your sacrifices have not gone unappreciated. My family and I will forever remember you in our thoughts and prayers. As well, I pray these findings and recommendations will one day serve a purpose to your well-being and ability to do your job.

Acknowledgments

First and foremost, I want to thank God for giving me the courage, strength, and willpower to take my first step on the path to completing my journey through all of the rigors within the Doctor of Business Administration program; without His presence in my life, I would not have had the resolve to go this far. I want to express my sincere love and appreciation for my wife, Minette, for supporting me every day by taking care of our children and our home while I spent countless hours researching, analyzing, and writing this dissertation. Minette, I knew from the moment I met you we would have a wholesome life together, and your presence along on this journey is another credit to you and your commitment to us. I would like to thank my children, Desirae, Alexander, Emily, Addyson, and Alyssa for sparing much of their time with me so that I could dedicate my time to my research. I would also like to thank the many members of my extended family who encouraged me along the way. Dad, your words of encouragement kept me afloat. Mom, your prayers have always been a shining light throughout my life, especially through this endeavor. Clark and Patti, I cannot thank you enough for your wonderful daughter, she is everything to me. As well, I truly appreciate your encouraging guidance, wisdom, and support to help Minette, the children, and I walk along this path together. In addition to my family, I would like to extend my appreciation to the professionals within the Department of the Navy who supported my research; in particular, I want to thank Joe for convincing me to continue my education and Rich for his willingness to sponsor me while I communicated with many leaders across the Navy. Last, but certainly not least, I would like to thank the members of my dissertation committee: Dr. John Johnson, Dr. Christopher Hicks, Dr. Nicole Lowes, and Dr. Edward Moore. Each of you have shared very valued knowledge and guidance with me that I know I'll carry with me for the rest of my professional career and life beyond. God bless you all.

Table of Contents

Abstract.....	ii
Approvals	iii
Dedication.....	iv
Acknowledgments	v
List of Tables	xi
List of Figures.....	xii
Section 1: Foundation of the Study	1
Background of the Problem.....	3
Problem Statement.....	5
Purpose Statement	6
Research Questions	6
Nature of the Study.....	7
Discussion of Research Paradigms.....	8
Discussion of Design.....	9
Discussion of Method.....	13
Discussion of Triangulation	15
Summary of the Nature of the Study	16
Conceptual Framework	16
Project Management Concept.....	19
Human Resources Management Concept.....	20
Human Resource Allocation Problem Theory	21
Actors	21

Project Resource Management Construct	22
Relationships Between the Concepts, Theory, Actors, and the Construct	23
Summary of the Research Framework	24
Definition of Terms	25
Assumptions, Limitations, Delimitations	28
Assumptions	28
Limitations.....	29
Delimitations	30
Significance of the Study.....	31
Reduction of Gaps in the Literature	31
Implications for Biblical Integration	32
Benefit to Business Practice and Relationship to Cognate.....	34
Summary of the Significance of the Study.....	34
A Review of the Professional and Academic Literature	35
Business Practices	36
The Problem	42
The Concept of Project Management.....	43
The Concept of Human Resource Management.....	48
Human Resources Allocation Problem Theory	54
The Construct of Project Resource Management.....	54
Related Studies	65
Anticipated and Discovered Themes.....	67
Summary of the Literature Review	75

Summary of Section 1 and Transition	75
Section 2: The Project	77
Purpose Statement	77
Role of the Researcher.....	78
Conducting Research through an Ethical Lens	79
Controlling Bias in Research.....	79
Listening Well, Asking the Right Questions, and Being Adaptive	80
Research Methodology	81
Discussion of Flexible Design.....	81
Discussion of Qualitative Research.....	84
Discussion of Method for Triangulation	87
Summary of Research Methodology	88
Participants	88
Selecting Participants to Interview.....	89
Participant Awareness	89
Population and Sampling.....	91
Discussion of Population.....	91
Discussion of Sampling.....	92
Summary of Population and Sampling.....	93
Data Collection and Organization	94
Data Collection Plan.....	95
Instruments	96
Data Organization Plan.....	98

Summary of Data Collection and Organization	99
Data Analysis.....	99
Emergent Ideas	99
Coding Themes.....	100
Interpretations.....	101
Data Representation.....	101
Analysis for Triangulation.....	101
Summary of Data Analysis.....	102
Reliability and Validity	102
Reliability	103
Validity	104
Bracketing.....	105
Summary of Reliability and Validity	106
Summary of Section 2 and Transition	106
Section 3: Application to Professional Practice and Implications for Change.....	108
Overview of the Study.....	109
Presentation of the Findings	109
Themes Discovered	110
Interpretation of the Themes	121
Representation and Visualization of the Data	141
Relationship of the Findings.....	143
Summary of the Findings	156
Application to Professional Practice	157

Improving General Business Practice	157
Potential Application Strategies	160
Summary of Application to Professional Practice.....	164
Recommendations for Further Study.....	165
Reflections	167
Personal and Professional Growth.....	167
Biblical Perspective	169
Summary of Reflections	172
Summary of Section 3	173
Summary and Study Conclusions.....	174
References	177
Appendix A: Participant Recruitment Email/Letter Template	193
Appendix B: Participant Informed Consent Form Template	194
Appendix C: Participant Interview Guide Template	197

List of Tables

Table 1. Total Scholarly Sources Reviewed in Case Study	66
Table 2. Total Scholarly Sources Reviewed in Literature Review.....	66
Table 3. Semi-Structured Interview Participation	142
Table 4. Ranked Dominant Codes Frequencies Discovered During Interview Participation	142
Table 5. Translation of Emergent Ideas and Dominant Codes into Discovered Themes.....	143

List of Figures

Figure 1. Relationships, by way of the PRM Construct, between PM and HRM Concepts 18

Section 1: Foundation of the Study

The United States Department of the Navy (DON) relies on project management (PM) processes to manage various projects that enable the United States Navy (USN) to meet mission requirements. In order to manage the DON projects, human capital must be recruited, hired, staffed, trained, developed, managed, and retained to facilitate the necessary PM processes that enable the USN to meet mission requirements. Human resources (HR) is the necessary function that must use human resources management (HRM) tools and techniques to empower human capital with the ability to complete DON projects for the USN. The DON has long understood the viability of HRM (Darling & Whitty, 2016). However, a lack of emphasis has been applied to exploring the effectiveness of how HRM tools and techniques are employed to enable human capital to effectively apply PM processes to support the USN in meeting mission requirements (Ballesteros-Pérez et al., 2012).

Section 1 provides essential information pertaining to the background of the problem, the problem statement, and the purpose statement. The nature of the study, to include how and why the selected research paradigm was chosen, is addressed. A definition of terms, assumptions, limitations, and delimitations are provided; as well, an explanation for the significance of the study and implication for the integration of biblical scripture are also addressed. A comprehensive review of scholarly literature is provided to codify reasoning for this research undertaking. The various views and beliefs shared in the works by the scholarly authors aided in the formation of the conceptual framework that guided the research.

Section 2 commences with the purpose statement, which is revisited in order to emphasize the reasoning for the research to be conducted. The role of the researcher, as well as who the participants are, are addressed to identify the impact of each stakeholder in this research.

The research method and design are highlighted to convey how the research was conducted. The research population and sampling are introduced to discuss the research sampling strategy. Data collection methods are discussed to identify the instruments, data collection techniques, and data organization techniques. The data analysis methods and coding process are observed to specify how the data were interpreted. The reliability and validity of the research are examined to underscore the utility of the methods by which the research was conducted.

Section 3 begins with an overview of the study. During the presentation of the findings, the researcher explains the themes discovered during the collection of data via semi-structured interviews, data observation, and personal observation. Emergent ideas are compared to the composition of the codes that were identified within the NVivo application. A visual representation of the data are provided so that the reader has an opportunity to see the correlation amongst the most frequent codes and the corresponding discovered themes. The relationships with the findings are then discerned as they relate to the research questions, the conceptual framework, the scholarly literature reviewed, and the research problem. The application to professional practice is then discussed to discern methods for improving general business practices and potential application strategies. Recommendations for further study are also based upon the findings from this study. Researcher reflections are shared to express the researcher's personal and professional growth, by providing insight into how conducting this research project has provided for personal and professional growth. The researcher also reflects on the Biblical perspective attained from this research by providing a detailed discussion of how the business functions explored in this study relate to and integrate with a Christian worldview. This section will conclude with a summary of Section 3. Lastly, this dissertation will conclude with a summary and study conclusions.

Background of the Problem

HRM that is implemented to support PM is a group of tools and techniques that entails the development, management, organization, and leadership of project teams (Abu-Hussein et al., 2016). According to Ballesteros-Pérez et al. (2012), there is a lack of emphasis on the utility of HRM as it relates to PM. This is apparent with the recent change to the commonly known reference to the PM practice, the Project Management Body of Knowledge (PMBOK Guide; Project Management Institute, 2017). In the PMBOK Guide (5th ed.) the process of applying HRM to the management of projects was formally known as the Project Human Resources Management process (Project Management Institute, 2013). However, in the PMBOK Guide (6th ed.) this process was formally changed to Project Resource Management (Project Management Institute, 2017).

Huemann et al. (2007) advocated that project managers of project-based organizations already face a variety of challenges when attempting to efficiently integrate an organizationally centric HRM framework into projects. Given the recent changes within the PMBOK Guide (6th ed.), it is reasonable to consider what could stimulate the aforementioned changes that may ultimately impact various aspects of projects. As well, it is reasonable to consider whether the methods to apply HRM to facilitate PM have been stimulating factors. To narrow the scope to a profession that utilizes PM to accomplish organizational goals, this research has been limited to the use of PM within the DON. In this case study, the premise of this study is to focus on the use of HRM to plan, estimate, acquire, develop, manage, and control project teams within acquisition mission-oriented organizations of the DON.

The Department of Defense (DoD), as well as the DON, have long acknowledged the necessity of PM as it relates to resource acquisition, distribution, and utilization to produce

deliverables that enable mission accomplishment (Eckerd & Snider, 2017). Darling and Whitty (2016) expressed USN civil engineering project management offices (PMO) were among the first PMOs in the military. As time has passed DON mission requirements have changed (Darling & Whitty, 2016; Rendon, 2015); therefore, PM processes within the DON have needed to progress in order to meet modern program requirements (Eckerd & Snider, 2017). According to Rendon (2015), development via the implementation of knowledge-sharing initiatives that are used to plan, estimate, acquire, develop, manage, and control the DoD acquisition workforce (AWF) members has been identified as a primary goal of the DoD Acquisition, Technology, and Logistics (AT&L), Human Capital Strategic Plan (HCSP), which is a derivative of the Defense Acquisition Workforce Improvement Act (DAWIA). Although planning, estimation, acquisition, development, management, and control through knowledge sharing is a primary goal of the DoD DAWIA, the use of HRM tools and technique to share knowledge are ineffectively used by DON project management professionals (Eckerd & Snider, 2017; Rendon, 2015).

Albeit these are general references that point out the utility of HRM as it relates to PM, there is a gap in the literature that accounts for the use of HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams within acquisition mission-oriented organizations of the DON. Shahzad et al. (2016) suggested that investigating the role of project exclusive HRM capabilities coupled with HRM strategies will be a major contribution to the existing literature. Huemann (2010) also elucidated that the use of HRM to support project-based organizations would be a promising research topic. Therefore, this research is intended to add value to the DON organizations and all other stakeholders who utilize HRM tools and techniques to facilitate PM.

Problem Statement

The general problem to be addressed is the ineffective use of HRM tools and techniques by project managers to plan, estimate, acquire, develop, manage, and control project teams resulting in the potential for projects to be impacted. Ekström et al. (2019) implied that a project manager's ability to effectively plan, estimate, acquire, develop, manage, and control project teams is limited to their ability to work cohesively with HR practitioners in order to synchronize socio-cognitive skills amongst project team members. Keegan et al. (2018) also suggested that a principal reason for a project manager's inability to plan, estimate, acquire, develop, manage, and control a project team is due to a lack of understanding about how to employ HR practitioners to support the implementation of HRM tools and techniques in order to synchronize socio-cognitive skills amongst project team members. Hur (2018) found that the methods in which HRM tools and techniques (e.g., pay-for-performance policies, contribution awards, as well as recruitment and retention incentives) are used can be particularly impactful to the level of job satisfaction of employees within the DON, which is a reason for project managers within the DON to be cognizant of the utility that can be realized by appropriate use of HRM tools and techniques to enable those DON project managers to effectively plan, estimate, acquire, develop, manage, and control project teams. Therefore, the specific problem to be addressed is the ineffective use of HRM tools and techniques by project managers within acquisition mission-oriented organizations of the DON to plan, estimate, acquire, develop, manage, and control project teams resulting in the potential for the integrity of the processes of a DON commissioned project to be adversely impacted.

Purpose Statement

The purpose of this multisite case study is to explore how project managers, within acquisition mission-oriented organizations of the DON, use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects. By extension, this research will help researchers explore how project managers in general use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects. Due to the dynamic role of PM in the development of Naval assets, PM is regarded as an essential function of the DON (Darling & Whitty, 2016; Hur, 2018; Sandhu & Khan, 2017). Sandhu and Khan (2017) pointed out that the DON has realized the value of the human dimension of project management as far back as the period of time when the Panama Canal was being constructed. Furthermore, Salovaara and Bathurst (2018) acknowledged that project outcomes fall on the shoulder of project teams and is of particular significance within the DON. Therefore, there was a precedent set for the need to explore the perspectives of both project managers and HR practitioners within acquisition mission-oriented organizations of the DON. The resulting input was analyzed in order to interpret and describe the impact of such cohesion. At this point in the research, the phenomenon was generally defined as being related to the relationship, teamwork, and shared resources between project managers and HR practitioners within acquisition mission-oriented organizations of the DON.

Research Questions

According to Keegan et al. (2018), HRM functions, such as career development and employment relations, are critical to organizational success. In particular, Keegan et al. (2018) advocated that HRM functions are critical to projectized organizations. However, HRM functions can be neglected due to the intricate processes that are involved in developing and

managing projects and project teams (Ekström et al., 2019; Guinan et al., 2019; Keegan et al., 2018). The following research questions were posited in order to explore how project managers use HRM tools and techniques in order to plan, estimate, acquire, develop, manage, and control project teams. In particular, the following research questions were posited in order to explore how DON project managers use HRM in order to plan, estimate, acquire, develop, manage, and control project teams within acquisition mission-oriented organizations of the DON:

RQ₁: What effect does HRM tools and techniques have on the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON?

RQ₂: Why do project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams?

RQ₃: How do project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams?

RQ₄: How is the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON effected by DON project managers' ineffective use of HRM tools and techniques?

Nature of the Study

The research method and design for this research is a qualitative multisite case study. This research method was selected because of the natural purpose to explore the demarcation, depths, richness, and complexity of the soft sciences that are impartial to the functionality of HRM as it relates to PM (Abma & Stake, 2014; Creswell & Poth, 2018; Keegan et al., 2018;

Stake, 2010; Yin, 2018). Those dynamics are inherent to the realization that projects are affected because HRM can be utilized in a manner that can cause an unexpected effect (Pournader et al., 2015). In specific, how project managers, within acquisition mission-oriented organizations of the DON, use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams. The intended nature of this research was for the result of the research to add to PM and HRM bodies of knowledge. Outlined below is the identification of the intent to study and those case elements that align to the research topic.

Discussion of Research Paradigms

When considering the impact of a philosophical perspective it can be realized that such a perspective can determine how the research will be conducted. According to Creswell (2014), three common research paradigms are constructivism, postpositivism, and pragmatism. Consistent with Creswell's (2014) observation, constructivism focuses on understanding, multiple participant meanings, and theory generation; postpositivism emphasizes reductionism, measurement, and theory verification; and pragmatism highlights consequences of actions, is problem centered, and pluralistic. Creswell (2014) also elucidated to a qualitative research method as being in concert with a constructivist approach to research, a quantitative research method as corresponding to a postpositivist approach to research, and mixed methods research as being impartial to a pragmatic approach to research.

In this research, a constructivist lens was used to explore how project managers, within acquisition mission-oriented organizations of the DON, use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects. According to Creswell and Poth (2018), by using a constructivist lens as an interpretive framework, researchers are capable of approaching their research flexibly with an emic

viewpoint. The relativist nature of a constructivist paradigm is for the researcher and the researched to construct a variety of realities through lived experiences (Creswell & Poth, 2018). Given the possibility for the researcher to impact research, the research was subjective and value bound to the researcher's perspective (Creswell & Poth, 2018).

Discussion of Design

Maxwell (2013) emphasized that qualitative research merely necessitates a clearer and less restrictive concept of how research could be conducted. With refined and well analyzed data, qualitative research designs can produce undeniable and serendipitous results (Miles et al., 2018). With consideration for the limited research regarding use of HRM tools and techniques to develop project teams within acquisition mission-oriented organizations of the DON, by nature a qualitative research design was determined to be most fitting for this study (Darling & Whitty, 2016; Hur, 2018; Sandhu & Khan, 2017). Of the various types of qualitative research designs to consider, case study, narrative, phenomenology, grounded theory, and ethnography qualitative research methods were contemplated for the varying uses that are relative to each particular design (Charmaz, 2015; Creswell, 2014; Creswell & Poth, 2018; Leedy & Ormrod, 2015; Maxwell, 2013; Merriam & Tisdell, 2016; Miles et al., 2018; Saldaña, 2011; Stake, 2010; Yin, 2018).

For this research, a qualitative case study research design was selected; in particular, a multisite case study research design was chosen to conduct this research. According to Yin (2018), to get the most out of case study research, researchers should consider and appreciate the distinctions of other research methods. Therefore, in addition to qualitative case study research designs, other types of qualitative research designs were considered when determining how to conduct this research. The reason why other qualitative research designs were considered but not

chosen to conduct this research is because the utility of those designs that were also considered did not align with the nature of this study. The descriptions below offer an explanation as to why each qualitative research design was considered and why it was or was not selected.

Case Study Research Design. When considering whether a case study approach is or is not appropriate, Creswell and Poth (2018) suggested that a researcher should identify the intent of the study and choose the cases that are aligned to the research topic. Saldaña (2011) advocated that cases are often chosen purposefully because of the opportunities that arise for researchers to focus on their study. To conduct this research, Creswell and Poth (2018) expressed when conducting a case study, researchers need to develop data collection procedures and to identify an approach to analyze their collected data. Creswell and Poth (2018) explained to make use of collected data via qualitative case study research methodology, the collected data needs to be used to study a case, or cases, within a bounded system. Since the intent of this research was to gain an understanding through exploration of multiple cases that are germane to the research problem, and the research was limited to the situationally supportive integration of two functions (i.e., PM and HRM) inside the realm of acquisition mission-oriented organizations within the DON, the design of case study research was ideal for this research (Creswell, 2014).

Multisite Case Study. The reason for selecting a multisite case study research design was because consideration for multiple cases can help to provide opportunities to establish patterns and causal relationships through a process of intimate examination of verifiable evidence and emerging themes (Haddock-Millar et al., 2016; Yin, 2018). Since the scope of this research was narrowed to a point that did not reflect all processes within acquisition mission-oriented organizations of the DON it was more conducive to study PM and HRM processes at multiple

DON sites (Yin, 2018). In this study a limited scope of personnel (i.e., from PM and HRM backgrounds) from multiple DON acquisition mission-oriented organization were studied.

Within-Site Case Study. Maxwell (2013) elucidated to within-site case studies as having a purpose to connect strategies in order to look for relationships. According to Yin (2018), a within-site case study would be akin to conducting an in-depth study of all functions within a particular single organization at a particular single location in order to discover explicit knowledge that is commensurate with the case. The reason for not selecting a within-site case study design was because the scope of this research was limited to two processes (i.e., PM and HRM) inside the realm of acquisition mission-oriented organizations within the DON. Therefore, since this research emphasized a need to research multiple sites with a limited scope, in lieu of a broad scope of a single site, a within-site case study research design was not conducive to this research.

Narrative Research Design. A narrative research design was considered but not chosen. The decision not to use a narrative research for this qualitative study was because expressed and lived stories of a particular individual or group of people were not the premise for this research (Creswell & Poth, 2018). Maxwell (2013) explained that like single case studies, narrative research focuses on connecting strategies to look for relationships. Since the intent of this research was to explore multiple cases that were bounded by two processes (i.e., PM and HRM) inside the realm of acquisition mission-oriented organizations within the DON, a narrative research design was not conducive to the research as it was designed.

Phenomenology Research Design. A phenomenology research design was considered but not chosen. The decision not to use a phenomenological research for this qualitative study was because this research was not centered on a particular phenomenon (Creswell & Poth, 2018).

Although phenomenology may help to shed light on aspects of research that may otherwise go unnoticed, the premise of the design is to focus on the essence of an experience (Creswell & Poth, 2018; Maxwell, 2013). On the contrary, the focus of this research was not to explore a particular phenomenon or phenomena alone, but rather to conduct in-depth analysis of multiple cases that were bound by HRM and PM processes inside the realm of acquisition mission-oriented organizations within the DON (Creswell & Poth, 2018). Therefore, a phenomenological research design was not conducive to this research as it was designed.

Grounded Theory Research Design. A grounded theory research design was considered but not chosen. Saldaña (2011) insisted that grounded theory is complex and multifaceted, and the research design is used in many different types of research. The decision not to use grounded theory as the research design for this qualitative study was because conducting research to develop a theory by examining multiple individuals (i.e., stakeholders beyond project managers and HR practitioners) who share a stake in the same process was not the premise for conducting this research (Creswell & Poth, 2018). According to Stake (2010), if the goal is to develop theory then a grounded theory research design is the prime choice design for a researcher to consider. Although in the present study grounded theory was not considered the optimal research design to steer this research, Bryant and Charmaz (2015) indicated that grounded theory research has functionality that can be comprehended via deductive and inductive lens; therefore, the results of this research may spur the use of grounded theory in combination with a deductive (e.g., quantitative correlation) study. Regardless, the goal of this research was not to develop theory alone, but to conduct in-depth analysis of multiple cases that were bound by PM and HRM processes inside the realm of acquisition mission-oriented organizations within the DON.

Therefore, a grounded theory research design was not conducive to this research as it was designed.

Ethnography Research Design. An ethnography research design was considered but not chosen. The decision not to use ethnography as the research design for this qualitative study was because the purpose of this research was not to study cultural knowledge that is learned through behaviors that are generated within a societal body (Saldaña, 2011). According to Creswell and Poth (2018), ethnographers are interested in studying shared patterns of behavior within an entire culture sharing group (e.g., DoD AWF employees of all AWF career fields). This research was not being conducted in order to ascertain a particular pattern of behavior within the confines of an entire culture sharing group. Moreover, since the emphasis of this research was not to discover a particular pattern of behavior within the confines of an entire culture sharing group, but rather to conduct in-depth analysis of multiple cases that were bounded by HRM and PM processes within the realm of acquisition mission-oriented organizations within the DON, an ethnography research design was not conducive to this research as it was designed.

Discussion of Method

Creswell (2014) suggested that researchers consider the larger philosophical ideas they espouse when considering different research methods. An ontological, epistemological, and axiological framework of philosophical beliefs enabled the researcher to apply consideration for the context of scholarly literature, interviews, and observations in order to formulate an understanding of meanings and experiences relative to PM and HRM bodies of knowledge. Methodologically, the qualitative research method via constructivist lens was applicable for this research because of the emphasis to rely on interviews, observations, and analysis of scholarly literature (Creswell & Poth, 2018).

Qualitative Research Method. A qualitative research method was chosen because the method was conducive to the exploration of this problem since the boundaries were not clearly defined between the phenomenon and context of the problem (Yin, 2018). As Creswell (2014) stated, a qualitative approach to research, via a constructivist perspective, helped to understand the boundary addressed in this problem. The undefined boundary in this case study fell between how projects are intended to be affected by HRM tools and techniques and how projects are actually affected. The phenomenon explored in this case study research was the realization that a project may be affected in a particular manner because HRM is being utilized in such a way that is catalyst to a problem. The context of the problem was the method by which HRM is utilized as a process to facilitate PM.

Quantitative Research Method. The reason for selecting a qualitative research method over a quantitative research method was because there is limited research and theory to consider regarding the exploration of how project managers within acquisition mission-oriented organizations of the DON use HRM tools and techniques to develop project teams (Darling & Whitty, 2016; Hur, 2018; Sandhu & Khan, 2017). Accordingly, Yin (2018) explained that “how” and “why” questions are essentially explanatory in nature and are commensurate with ascertaining the utility of operational methodologies over time rather than relying on frequency ratios to discern significant events (p. 10). On the other hand, Creswell (2014) emphasized quantitative research methods are typically experimental with an intent to find and quantitatively verify the cause of an event. With limited knowledge to underscore how and why this problem exists, the ability to define the scope of this research via quantitative research methodologies and designs was limited.

Mixed Methods Research Method. The motivation to not pursue a mixed methods research method in this case was a combination of the aforementioned reasoning regarding the selection of a qualitative research method and non-selection of a quantitative research method. The chosen research method sought to understand how and why there is ineffective use of HRM tools and techniques by project managers within acquisition mission-oriented organizations of the DON to plan, estimate, acquire, develop, manage, and control project teams. Whereas a qualitative approach focuses on understanding through exploration and a quantitative approach justifies research through measurement, the apparent lack of research that has been conducted to understand the problem thrusts a motive to understand how and why the problem exists (Merriam & Tisdell, 2016). Therefore, a mixed methods research design was not conducive to this research at the time of this research; however, this research may spur reasoning for researchers to conduct a mixed methods study as more knowledge about the subject matter is gained through additional exploration of the correlation of PM and HRM bodies of knowledge.

Discussion of Triangulation

Creswell and Poth (2018) advocated interviews are often the primary data collection method for qualitative research. Therefore, interviews were conducted via interview questions that were formed as a result of a review of relative scholarly literature. Project managers and HR practitioners from five acquisition mission-oriented organizations within the DON were participants of the abovementioned interviews. Creswell and Poth (2018) suggested to perform validation strategies such as triangulation of data sources in order to establish credibility. Therefore, perspectives of six interview participants were triangulated by interviewing project managers and HR practitioners from five different DON acquisition mission-oriented organizations. In specific, three federal supervisory human resources specialists and three federal

project managers from five DON acquisition mission-oriented organizations were the interview participants.

Process for Gaining Access to Interview Participants. In order to gain access to the aforementioned participants the intent of this research was expressed to DON leadership via communication with the local chains of command. In preparation to conduct interviews for this qualitative multi-site case study, local DON leadership was notified of intent to conduct the interviews; as well, prime acquisition mission-oriented organizations of the DON were identified. Local DON leadership were made aware of the activity candidacy for this research. Local DON leadership did express willingness to support the research efforts by sponsoring the researcher as a channel of communication with adjacent leadership as long as ethical guidelines were followed. In order to aid in identification of participants for the research the local DON leadership communicated the intent of conducting research interviews with equivalent fellow DON leadership at each of the candidate activities.

Summary of the Nature of the Study

The research method and design were selected based off of the identified intent of the study and how the cases were aligned to the research topic. Scholarly journal articles relative to PM, HRM, the DoD, and the DON were reviewed in order to develop the foundation of this qualitative multi-site case study. Results of this analysis aided in the development of the interview questions that guided the research as it was conducted during field interviews.

Conceptual Framework

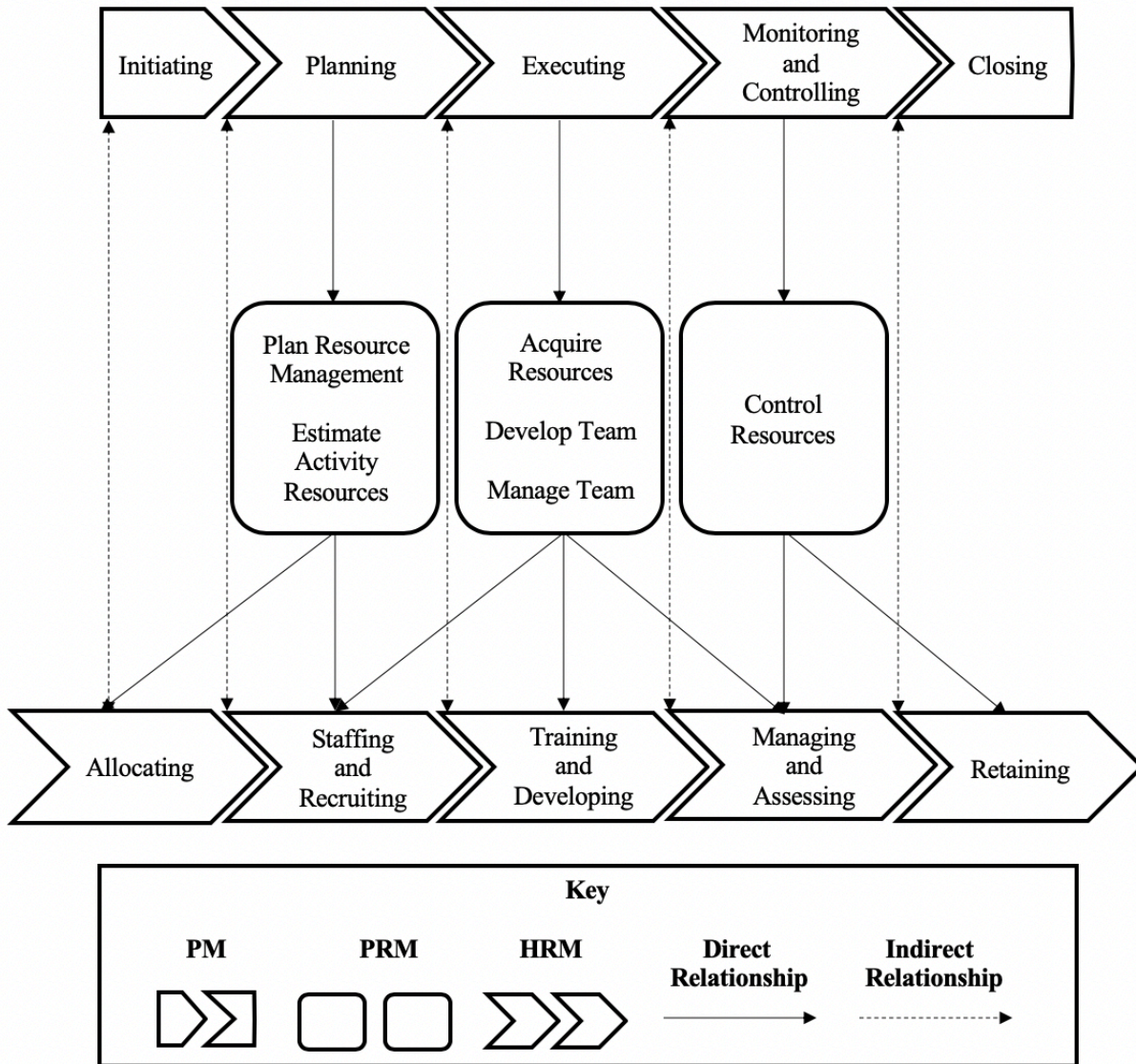
Review of scholarly literature compelled the researcher to reflect inclusively of the views and realities constructed by PM and HRM professionals. A variety of concepts and theories that were researched are considered relative to the problem statement. In a query of PM relevant

concepts from the scholarly literature, references to the concept of HRM were sparse in comparison to the other relative concepts. The following conceptual framework was designed to be explored inductively in order to understand how and why HRM tools and techniques are used to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects.

Through the lens of a constructivist paradigm, social situations are constructed inversely by differing people and therefore subjective in nature, which compels participation from both the researcher and the researched (Smith & Shaw, 2019). Chandra and Shang (2017) argued specifically while in pursuit of clarity apropos to a particular phenomenon, the interpretive lens used by researchers who choose to see their research with a constructivist paradigm, are often not predicated on pursuing research via priori construct or theory. However, previously developed theory is posited in this conceptual framework to form the premise for conducting inductive research. In lieu of the former priori, during the latter researchers are inclined to focus on posteriori exploration and discovery of new processes and theoretical concepts via axial or inductive coding of a narrow scope of research participants, in order to build a conceptual framework (Chandra & Shang, 2017).

Figure 1

Relationships, by way of the PRM Construct, between PM and HRM Concepts



Note. Relationships between PM and HRM concepts. This figure depicts how PM processes are enabled to plan, estimate, acquire, develop, manage, and control project teams by HRM tools and techniques via PRM. The figure ties PM processes and HRM tools and techniques together via visual reference to how PRM is related to the effect of each function.

Project Management Concept

The following research question was answered by researching the PRM concept: Why do project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams? As discussed in the PMBOK Guide (6th ed.), projects are chartered non-operational endeavors that are skillfully managed by project managers who have an understanding of the PM concepts of project lifecycles process groups and PM knowledge areas (Project Management Institute, 2017). Project lifecycle process groups can consist of the following steps: Initiating, planning, executing, controlling, and closing of a project; each of the aforementioned processes are iterative with the control element spanning the entire project lifecycle (Project Management Institute, 2017). PM knowledge areas can consist of project integration management, project scope management, project schedule management, project cost management, project quality management, project resource management (PRM), project communication management, project risk management, project procurement management, and project stakeholder management (Project Management Institute, 2017).

As can be reflected upon in Figure 1, the concept of PM echoes the project process group framework for activities with a known beginning and end to be managed by sequential dependencies in order to start and finish as commissioned (Leite et al., 2017). PM has been conceptualized as an efficient application of knowledge, skills, abilities (KSA) by project managers to plan project activities so that project milestones can be met on time and within budget by project teams (Anholon & Sano, 2016). Therefore, project lifecycle process groups, and PM knowledge areas are the context of a project that enables project teams to produce deliverables from conception to completion to delivery to closing. Therefore, there is reasoning

for the need to understand why project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams.

Human Resources Management Concept

The following research question was answered by researching the HRM concept: What effect does HRM tools and techniques have on the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON? According to Momeni and Martinsuo (2018), in project-based organizations the concept of HRM allocation befits a critical posture when the same resources are required by projects and operational activities simultaneously. Nevertheless, the development and daily management of human resources are pragmatic aspects of PM success (Anholon & Sano, 2016). Whereas traditional organizations are typically highly centralized, relatively stable, and vertically integrated, contemporary organizations such as project-based organizations are typically highly decentralized and rely extensively on HRM because of a constant fluctuation in workforce requirements (Schneider et al., 2017).

As can be seen in Figure 1, the concepts that encompass HRM tools and techniques that are essential for resource allocating, staffing, recruiting, training, development, assessing, managing, and retaining both projectized activities and operational activities (Momeni & Martinsuo, 2018). Project managers could realize many benefits from seeking to improve their managerial skills, professionalism, and technological skills by capitalizing on the KSAs, competencies, and strategies of local HR practitioners (Nguyen & Hadikusumo, 2018). Nonetheless, as Medina and Medina (2017) emphasized, learning is essential in knowledge-intensive organizations, such as project-based organizations, and that is where HRM facilitates a

role in the success of PM in project-based organizations, to include those within the DON.

Therefore, there is reasoning for the need to understand the effect HRM tools and techniques have on the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON.

Human Resource Allocation Problem Theory

Bouajaja and Dridi (2017) explained that human resource allocation problem (HRAP) theory is an awareness that human resources can play a significant role in the success of an organization. Bouajaja and Dridi (2017) also emphasized the involvedness surrounding HRAP theory is largely due in part to the characteristics of the stakeholders involved in the allocation of HRM tools and techniques that are subject to be allocated for project assignment. According to Bouajaja and Dridi (2017), the optimization of human resources allocation is a challenging and demanding undertaking of PM, because the knowledge area processes are associated with the management of project team members, managing their ergonomic needs for productivity, as well as planning for the available resources they may need to accomplish their jobs. For this reasoning, project managers seek more efficient tools in order to effectively optimize the use and allocation of readily available resources among the various facilities or systems (Bouajaja & Dridi, 2017). Therefore, HRAP theory guided the research as an input to this case study by framing the way in which the effectiveness of how and why human resources are allocated in support of PM is observed and noted during interviews that are conducted for this research.

Actors

The actors of this research are DON project managers and supervisory human resources specialists within DON acquisition mission-oriented organizations. Within the context of PM, a human resources practitioner is a person assigned to the execution of processes relative to the

allocation, staffing, recruitment, training, development, assessment, management, leadership and retention of project team human capital project (Rahmanniyay & Yu, 2019). A DON supervisory human resources specialist is a human resources practitioner who is in charge of a HRM section of other human resources specialists. A project manager is the person assigned by the performing organization to lead the team that is responsible for achieving the project objectives (Project Management Institute, 2017). A DON project manager is the person assigned by the performing organization to lead the team that is responsible for achieving the project objectives that are relative to projects that are commissioned by the DON. A DON acquisition mission-oriented organization is an organization that orients operations, projects, programs, and research to a posture that enable the acquisition of resources to support DON uniformed services in meeting mission requirements (DON DAWIA Operating Guide, 2017, Eckerd & Snider, 2017; Keane et al., 2009).

Project Resource Management Construct

The following research question was answered by researching the PRM construct: How do project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams? According to the PMBOK Guide (6th ed.), personnel, materials, and equipment are among the principal resources that are necessary to manage a project (Project Management Institute, 2017). Bouajaja and Dridi (2017) emphasized that among PM resources, HRM knowledge areas are among some of the most significant tools and techniques that are used to ensure project quality and success. Therefore, it could be perceived by project stakeholders (e.g., project team members) that in order for a project to be completed on time and within budget, HR will be a necessary process. Furthermore, the concept of resource dependency expounds the need

to pursue objectives that drives organizations to be dependent on other entities that have the readily available resources and capabilities (Pfeffer & Salancik, 2003; Soda & Furlotti, 2017). Resource dependency also spurs reasoning for organizations to eliminate any uncertainty that dependence implies (Soda & Furlotti, 2017). Therefore, there is reasoning for the need to understand how project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams.

Relationships Between the Concepts, Theory, Actors, and the Construct

As PRM relates to the employment of human capital as a project resource, the following research question was answered by researching the relationships between PM and HRM concepts, the HRAP theory, and the PRM construct: How is the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON effected by DON project managers' ineffective use of HRM tools and techniques? Project managers and HR practitioners each have unique subsets of responsibilities that are germane to their primary responsibilities. Whereas HR practitioners support both operations and projects, project managers manage a variety of processes that are inclusive of several functional areas; to include managing the integration of HRM into projects (Momeni & Martinsuo, 2018). Therefore, PRM is an imperative process because the PM process involves the management, organization, and leadership of project teams, and can only be facilitated by cohesion between project managers and HR practitioners (Abu-Hussein et al., 2016).

This perspective postulates the intent of project managers to maximize, or to minimize, functions as deemed necessary in order to sustain project performance. However, the difficulty

surrounding resource assignment, as is posited in HRAP theory, can be explained by the fact that competent employees are sometimes scarce and therefore hard to allocate to project assignments (Bouajaja & Dridi, 2017). Nonetheless, HR is designed to facilitate those resource assignments via use of HRM tools and techniques. In this sense, there is a need to inductively explore how and why project managers use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects; in particular, how and why within acquisition mission-oriented organizations of the DON (Smith & Shaw, 2019). Therefore, there is reasoning for the need to understand how the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON can be affected by DON project managers' ineffective use of HRM tools and techniques.

Summary of the Research Framework

Through a constructivist lens, the HRAP theory underpins a reason to explore the effectiveness of the direct and indirect conceptual relationships that are relative to PM and HRM in order to codify the utility of HRM as an essential functional knowledge area process within PM. To recap, the relationships between PM and HRM are both direct and indirect. The construct of PRM bridges the PM and HRM concepts by reverting a normally operational HRM function into a projectized function to enable the PM concept to be functional from a human capital planning, estimation, acquisition, development, management, and control viewpoint. By following this conceptual framework to subjectively interview project managers and supervisory human resources specialists, the researcher was able to understand why certain levels of effectiveness are met throughout the lifecycle of DON projects (Chandra & Shang, 2017). By using a constructivist lens to view the problem, a methodological approach was taken to conduct

research that emphasized the collection of data via interviews, observations, and analysis of scholarly literature (Creswell & Poth, 2018).

Definition of Terms

Acquisition: Obtaining human and material resources necessary to perform project activities. Acquisition implies a cost of resources and is not necessarily financial (Project Management Institute, 2017).

Acquisition Mission-Oriented Organization: An organization that orients operations, projects, programs, and research to a posture that enable the acquisition of resources to support DON uniformed services in meeting mission requirements (DON DAWIA Operating Guide, 2017; Eckerd & Snider, 2017; Keane et al., 2009).

Defense Acquisition Workforce Improvement Act (DAWIA): A Congressional Act that necessitates the United States (U.S.) Secretary of Defense to establish policies and procedures for acquisition career management in order to ensure acquisition career field uniformity throughout the DoD (DON DAWIA Operating Guide, 2017; Eckerd & Snider, 2017).

DAWIA Program Management: The management of efforts to acquire defense weapons systems for U.S. uniformed service members (Eckerd & Snider, 2017).

DAWIA Program Manager: A DoD federally appointed official who is tasked with managing the efforts to acquire defense weapons systems for U.S. uniformed service members (Eckerd & Snider, 2017).

Human Capital: Within the context of PM, human capital are humans and are primarily one of the most challenging resources for project managers to manage because of the inherent individuality of each project team member; within the context of the DoD/DON, human capital

dictates PM effectiveness (e.g., cost, schedule, quality, etc.) through exploitation of competently developed human capital (Keane et al., 2009; Ling et al., 2018).

Human Resources (HR): Within the context of PM, HR is defined as the tools and techniques that facilitate the ability for HR practitioners to enable project managers to allocate, staff, train, develop, assess, manage, lead and retain project teams (Rahmanniyay & Yu, 2019).

Human Resources Allocation Problem (HRAP) Theory: Relates to the problems, regarding the allocation of HR, that are formed as a result of stakeholder characteristics and competencies relative to the allocation of HR (Bouajaja & Dridi, 2017).

Human Resources Management (HRM): Within the context of PM, HRM is defined as the processes of allocating, staffing, recruiting, training, developing, assessing, managing, leading, and retaining a project team (Rahmanniyay & Yu, 2019).

Human Resources Practitioner: Within the context of PM, a person assigned to the execution of processes relative to the allocation, staffing, recruitment, training, development, assessment, management, leadership and retention of project team human capital (Rahmanniyay & Yu, 2019).

Knowledge, Skills, Abilities (KSA): The competencies and qualifications that are necessary to perform jobs in support of project related work packages (Anholon & Sano, 2016).

Mission-Oriented: The use of systemic policies that are tie to state-of-the-art knowledge in order to attain specific goals (Mazzucato, 2018).

Program Management: The application of knowledge, skills, and principles to a program to achieve the program objectives and obtain benefits and control not available by managing program components individually (Project Management Institute, 2017).

Project: A temporary endeavor undertaken to create a unique product, service, or result (Project Management Institute, 2017).

Project-based Organization/Project Management Organization: A management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques to manage organizational projects (Project Management Institute, 2017).

Project Management (PM): The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements (Project Management Institute, 2017).

Project Manager: A person assigned by the performing organization to lead the team that is responsible for achieving the project objectives (Project Management Institute, 2017).

Project Resource Management (PRM): Includes the processes to identify, acquire, and manage resources needed to complete a project (Project Management Institute, 2017).

United States Department of Defense (DoD): A department within the executive branch that directs and supports of the federal military services within the United States (Eckerd & Snider, 2017; Keane et al., 2009).

United States Department of the Navy (DON): A military branch that is dedicated to national defense through sea-based strategic initiatives via world-wide maritime service (Eckerd & Snider, 2017; Keane et al., 2009).

DON Acquisition Workforce (AWF): Comprised of civilian and military members that translate military requirements into material solutions to support DON uniformed service members globally (DON DAWIA Operating Guide, 2017).

Assumptions, Limitations, Delimitations

According to Leedy and Ormrod (2015), assumptions need to be pertinent to the research methodology, limitations need to be consistent with research methodology, and delimitations should be consistent with the scope of the study. Leedy and Ormrod (2015) emphasized researchers form assumptions by questioning what is being taken for granted with respect to their problem. Leedy and Ormrod (2015) explained that limitations address weaknesses surrounding the scope of the research that may cast doubt in the readers' perceptions of the research as it is designed. Leedy and Ormrod (2015) also clarified the difference between limitations and delimitations by explaining delimitations identify the boundaries of research that falls outside of the intended research scope of the (Leedy & Ormrod, 2015). The assumptions, limitations, and delimitations of this case study are described below.

Assumptions

There were five identified assumptions in this research case study. The first assumption was the participants in this research would provide accurate, true, and unbiased responses to any interview questions. The risk for this assumption was the possibility that participants would not provide accurate, true, and unbiased responses to any interview questions. To mitigate this risk, results of the interview questions were triangulated to establish credibility (Creswell & Poth, 2018). The second assumption was interview participants who use HRM would assume HR practitioners are competent in their professional field of work. The risk was not all HR practitioners are competent in their profession. To mitigate this risk, HR practitioners in supervisory positions were requested exclusively to participate in the interviews as the respective HRM SME at each DON acquisition mission-oriented organization. The third assumption was interview participants who use PM would assume project managers are competent in their

professional field of work. This risk associated with this assumption was that not all project managers would be competent in PM competencies. To mitigate the potential risks, results of the interview questions were triangulated to establish credibility (Creswell & Poth, 2018). The fourth assumption was that some interview participants may perceive the functionality of HRM tools and techniques differently than others. The risk associated with this assumption was that all interview participant would perceive the functionality of HRM tools and techniques equally. To mitigate this risk, multiple interviews were conducted to triangulate perspectives in an effort to identify themes from the individual cases with respect to their perspectives of HRM tools and techniques as they related to their use within acquisition mission-oriented organizations of the DON. The fifth assumption was all interview participants would want their personal information to remain protected. The risk was that some interview participant would not care if their personal information was not protected. To mitigate this risk, all interview participants' personal information remained protected.

Limitations

There are five identified limitations in this research. The first limitation was the research would be limited to at least two acquisition mission-oriented organizations within the DON. This limitation was necessary in order to control the scope of the case study; therefore, to minimize any deviation from this case study research scope examination of non-acquisition mission-oriented organizations of the DON were not included in this case study. The second limitation was there would be at least one supervisory HR practitioner and one project manager from each DON acquisition mission-oriented organization to participate in the research. This limitation was necessary in order to ensure only the perspectives of subject matter experts who effect the PRM processes of a DON commissioned project were examined. A review of completed interview

participant consent forms aided the researcher in mitigating the possibility of interviewing candidates with professional backgrounds that were not commensurate with this case study. The third limitation was all interview participants are United States citizens. Per the DON DAWIA Operating Guide (2017), all acquisition workforce employees must meet citizenship requirements that are directed by the Office of Personnel Management (OPM); therefore, unless authorized by OPM, all interview participants will be United States citizens. It was not possible to mitigate or minimize this limitation due to the requirement for DON AWF employees to maintain a security clearance, which specifically requires national security clearance holders to have United States citizenship (Facility Security Clearance and Safeguarding of National Security Information and Restricted Data Rule, 1992). The fourth limitation was, with exception to referenced scholarly literature, only information from the specified interview participants, pertaining to the case study research problem, were analyzed. This limitation was minimized by reviewing additional unexamined scholarly literature that was relative to the subject of this case study. The fifth limitation was the limited literature on projects related to the DoD; DoD AWF; DON; DAWIA; HRM that was directly related to PM, or acquisition mission-oriented organizations. This limitation was minimized by seeking out newly published related literature.

Delimitations

There are six identified delimitations in this research. The first delimitation was a scope limited to civilian DON acquisition mission-oriented organization employees who work in an acquisition mission-oriented organization of the DON. The second delimitation was no other employees from other DON or DoD organizations would participate in this research. The third delimitation was no HR practitioners or project managers from outside of the aforementioned organizations would be participants in this research. The fourth delimitation was no personally

identifiable information was used to build this case study. The fifth delimitation was non-United States citizens would not be considered in this research because the scope of the project is limited to DON acquisition mission-oriented organization employees. The sixth delimitation was no in-person interviews would be conducted due to the health concerns forced by the implied effects of the 2019 novel Coronavirus disease.

Significance of the Study

This case study is significant because the rationale for the research was to explore in what ways there may be a lack of understanding about how and why projects are affected by the use of HRM tools and techniques. This case study is particularly significant because the rationale for the research was to explore in what ways there may be a lack of understanding about how and why projects are affected by the use of HRM tools and techniques within acquisition mission-oriented organizations of the DON. The gaps in the literature that will be reduced by this research is significant to PM and HRM bodies of knowledge (Leite et al., 2017).

Reduction of Gaps in the Literature

HRM and PM can be seen as complementary in terms of project lifecycle phase iterations; however, studies on the use of HRM tools and techniques to form, plan, estimate, acquire, develop, manage, and control project teams are limited (Leite et al., 2017). This research aimed to fill gaps in the knowledge so the utility of HRM, as it relates to PM, may be better understood. More specifically, the gaps in knowledge pertaining to understanding how and why project managers employ HRM tools and techniques to manage projects. In particular, this research addressed the gaps in knowledge that are relative to the function of HRM tools and techniques within projects that are chartered by acquisition mission-oriented organizations of the DON.

Acquisition mission-oriented organizations within the DON reflect no difference than any other functioning organization with respect to the need for having an understanding of the utility HRM can bring to an organization (Hur, 2018). In particular, project managers within acquisition mission-oriented organizations of the DON have a need to understand the function of HRM tools and techniques as it relates to all factors enabling the success of a project (Hur, 2018). This may not be accomplished without reducing the gaps in knowledge that can promulgate a comprehensive knowledge base of HRM tools and techniques for project managers to rely on in order to effectively manage their project teams. As well, reducing the gap in knowledge should help to construct a relational understanding of how and why cohesion amongst PM and HR practitioners can be essential for project success.

Implications for Biblical Integration

The finite basis for this research was to explore how and why HRM is used to facilitate PM in acquisition mission-oriented organizations of the DON. A principle reason for implementing HRM into PM is to enable project managers to manage their project teams with a formal set of guidelines that are designed to safeguard the project manager, project team, and the project (Momeni & Martinsuo, 2018). The Old Testament and New Testament of the Bible provide pure historical facts and reasoning for the need to implement HRM as tools and techniques to manage projects. Outlined below are a few examples of how integrating knowledge from the Bible can help a project manager embrace a framework that is established upon the formal set of guidelines that are written to help us manage our daily lives and lead us to eternal salvation.

King David of Israel resolved in God to declare, “Blessed is the man who walks not in the counsel of the wicked, nor stands in the way of sinners, nor sits in the seat of scoffers”

(*English Standard Version Bible*, 2008, Psalm 1:1). David's psalm highlighted a need for people, project managers nonetheless, to avoid accepting advice from resources that would oblige poor guidance independent of God's will. David's psalm then progressively directed people who stopped relying on poor guidance to not continue relying on resources that are independent of God's will so that they do not become a part of the problem. HRM is relative in nature because HR policies are the principle guidelines to facilitate project managers with the appropriate strategic control necessary to properly plan, estimate, acquire, develop, manage, and control project teams so that project team members remain a reliable resource throughout the project (Ling et al., 2018). Therefore, rather than relying on managerial instinct alone to manage a project team, project managers who choose to rely on counsel from reliable HR practitioners are capable of managing a project team more effectively.

In Acts (20:28), Luke prescribed "Pay careful attention to yourselves and to all the flock, in which the Holy Spirit has made you overseers, to care for the church of God, which he obtained with his own blood" (*English Standard Version Bible*, 2008). What Luke is exemplifying is a model of leadership over followers of Jesus Christ that project managers can follow to ensure the well-being of their project team members. Luke directed church leaders to pay careful attention to their congregation, which can be likened with project managers ensuring the well-being of their project team members. In the latter half of the verse, Luke professed for church leaders to care for the church of God. From this element of the verse, project managers must realize that all project team members are a part of God's creation. Therefore, they must have relationships that are built out of dignity and respect just as God demands of His church leaders who oversee His church. This last element of this verse is the most important dialog of the verse because Luke acknowledges Jesus Christ's sacrifice for the salvation of all people.

Project managers who take heed to this message and integrate it into their management processes will discover that managing project teams through the lens of a Christian worldview will always ensure the well-being of their project team.

Benefit to Business Practice and Relationship to Cognate

The researcher's field of study is PM. The researcher is a HR practitioner by trade who manages projects within an acquisition mission-oriented organization of the DON. This research is directly related to the PM business cognate. The research also ties into the business cognate of HRM. Collectively, this research adds value to both the HRM and PM business cognates. HR is inherently a major function within the business cognate of PM, because HRM tools and techniques yield the necessary competencies required to recruit, train, develop, manage, assess, and retain project team members (Rahmanniyay & Yu, 2019). Therefore, there was a need to explore the functional relationship between HRM and PM functions, especially since dysfunction between PM and HRM does indeed exist at some or many levels of PM lifecycle processes.

Summary of the Significance of the Study

This case study was written to reduce gaps in the knowledge revolving around the integration of HRM tools and techniques to support PM practices. The significance of this case study is how the results adds to the knowledge base of both HRM and PM. The implications for the integration of biblical scripture in this research can be realized by project managers considering the utility of HRM and PM through the lens of a Christian worldview in order to effectively manage a project team. Given the basis for this case study to explore the effectiveness of HRM integration into PM practices, the case study is directly related to the PM field of study, as well as the HRM field of study.

A Review of the Professional and Academic Literature

Creswell and Poth (2018) indicated that researchers present a review of scholarly literature in order to present results of similar studies. Yin (2018) emphasized the importance of a literature review because of the ability for researchers to display their mastery of the skills necessary to research a topic. As well, Yin (2018) highlighted a need for researchers to display mastery in their ability to correlate the scholarly literature to their respective research topic (Yin, 2018). According to Leedy and Ormrod (2015), conducting a literature review ascertains the breadth of previous research on a topic of interest and informs researchers of other like-minded researchers. Leedy and Ormrod (2015) also posited that literature reviews raise awareness pertaining to unknown gaps in research and show researchers how other methods have been used to conduct similar research.

The focus of this literature review relates to how the concepts of PM, HRM, and the PRM construct relate to, via a HRAP theoretical underpinning, the effects of the management of projects within the DON. The following literature review was framed in a way that will guide readers through the problem by peeling back the layers of functional dynamics of PM, HRM, and PRM. The literature review commences with a review of literature pertaining to how and why the DoD Defense Acquisition Workforce Improvement Act (DAWIA) is facilitated and managed within the DON to ensure weapons systems acquisition projects are managed efficiently and effectively. The literature is then aligned to the concepts of PM, HRM and the construct of PRM by introducing an aspect of ineffective management of DAWIA as it relates to acquisition mission-oriented organizations within the DON. Each of the aforementioned concepts and construct are reviewed by highlighting the thoughts of scholarly SMEs as they pertain to each subsequent element of the literature review. That is, literature pertaining to PM is reviewed in a

way as it relates to HRM, literature relating to HRM is then reviewed in a way as it applies to PM. Furthermore, literature pertaining to the PRM construct is reviewed as a synthesis of the PM and HRM concepts in order to describe the relationships of the concepts and construct via scholarly perspectives of relative SMEs.

Business Practices

According to the DON DAWIA Operating Guide (2017), it is clear to point out that the acquisition of highly complex weapons systems requires a workforce of highly educated acquisition professionals to make up teams that are competent in all matters related to weapons systems acquisition projects. Simply put, DAWIA is not an easy process and there are no fixed rules that apply to all situations surrounding the acquisition of weapons systems (DON DAWIA Operating Guide, 2017). Therefore, the resulting policies stemming from those concerns are the Nunn–McCurdy Act of 1982, the Packard Commission Reforms of 1986, the DAWIA of 1990, and the Federal Acquisition Streamlining Act (FASA) of 1994 (Smirnoff & Hicks, 2008). Of the aforementioned acts, the act most closely aligned with HRM tools and techniques, as the functions relate to acquisition mission-oriented organizations within the DON, is DAWIA professional certification and continuous learning requirements that are required of DON AWF employees.

Accordingly, DON is dedicated to getting the most capable weapon systems to United States Navy (USN) and United States Marine Corps (USMC) uniformed service members by the most cost-effective way possible (DON DAWIA Operating Guide, 2017). Therefore, DAWIA is necessary to ensure experienced and knowledgeable professionals are certified and continuously developed (Peters et al., 2017). As such, it is important to ensure the maintenance of such

competencies in order to continuously assess the efficiency and effectiveness of the acquisition of weapons systems to support the United States' warfighters (Peters et al., 2017).

To acquire weapons systems efficiently and effectively, the DON AWF relies comprehensively on readiness assessments for making decisions (Peters et al., 2017). The decisions pertain directly to whether or not to proceed with a given acquisition project (Peters et al., 2017). Within the DON, technology readiness assessments are a legal requirement for all major weapons systems acquisitions (Peters et al., 2017). This legal requirement is relevant to both PM and HRM because having a highly educated AWF is the most important requirement for DAWIA (DON DAWIA Operating Guide, 2017). It is necessary develop the competencies to manage and assess the projects that are initiated in order to acquire and utilize the resources that are necessary to develop the highly complex weapons systems (DON DAWIA Operating Guide, 2017).

Defense Acquisition Workforce Improvement Act. According to Rendon (2015), the DoD Acquisition, Technology, and Logistics (AT&L), group established the DAWIA in 1990. The goal of DAWIA is to establish and maintain a professional acquisition workforce within the DoD (Ritschel, 2012). DAWIA requires members of the AWF to meet specific education, training, and experience levels in order to meet various progressive levels of professional certification as part of their job requirements (Rendon & Rendon, 2016). Meeting these certification requirements confirms that the AWF employee has developed the competencies that are essential for carrying out their acquisition related responsibilities at a full level of performance (Eckerd & Snider, 2017). AWF employees need to comply with DAWIA requirements in order for DON organizations to meet mission requirements on time and within budget (Eckerd & Snider, 2017).

Professional Certifications. Professional certifications play a role in recruiting, developing, and retaining project managers (Blomquist et al., 2018). Each of the professional acquisition certifications have a specified amount of education, experience, and training that is required to meet certification requirements (Smirnoff & Hicks, 2008). Therefore, DON AWF employees, both civilian and military officers, must develop that specified amount of education, experience, and training in order to meet the requirements for their unique and progressive certification (Smirnoff & Hicks, 2008). To become professionally certified in a DoD DAWIA acquisition career field, the position to which a military service member, or civilian counterpart, is assigned must consist of work that is at least 50 percent dedicated to one of the following acquisition career fields: Business-Cost Estimating; Business-Financial Management; Contracting; Engineering; Facilities Engineering; Industrial and/or Contract Property Management; Information Technology; International Acquisition Career Path; Life Cycle Logistics; Program Management; Production, Quality & Manufacturing; Purchasing, Science and Technology Manager; Small Business; as well as Test and Evaluation (DON DAWIA Operating Guide, 2017).

Using a professional certification, such as a DAWIA career field certification, as a selection criterion for employment can also help to maintain the quality of human capital to enable project sustainment during cases where projects may lose team members (Blomquist et al., 2018). Farashah et al. (2019) addressed the practical interest of project managers, recruiters, head-hunters, as well as HR practitioners in project-based organizations is that professional certification is a way to make quicker, more objectified, and informed decisions about who to hire. Therefore, requiring a professional AWF certification to hire for DON acquisition mission-oriented organization project team positions can help to increase efficiency and effectiveness in

the candidate selection process (Farashah et al., 2019). For the DON, this is vital because the DON AWF is grounded in the values of dedication to service, diversity, excellence, integrity, teamwork, and trust (DON DAWIA Operating Guide, 2017). These traits are paramount qualities of the right people, to work on the right job, during the right time, because this translates to the effective delivery of weapons systems for the greatest warfighting organizations in the world (DON DAWIA Operating Guide, 2017).

DAWIA Program Management Acquisition Career Field. An AWF employee working as a professional in the program management career field is tasked with managing the various tasks associated with the acquisition of a weapon system (Eckerd & Snider, 2017). According to the DON DAWIA Operating Guide (2017), typical responsibilities that are commensurate with the duties associated with an incumbent program manager can encompass: “Conceptualization, initiation, design, development, test, contracting, production, deployment, integrated product support (IPS), modification, and disposal of weapons and other systems, supplies, or services (including construction) to satisfy DoD needs, intended for use in, or in support of, military missions.” (p. 126). DON policy holds that its AWF program managers should be proven leaders with current functioning experience within their programs’ respective managerial domains (Eckerd & Snider, 2017).

DAWIA Program Management Career Field Correlation to PM. The project management styles, communication styles, and individual needs, as well as self-awareness of how personal goals effect relations within a project management team highlights the relationship between military officers and civilian colleagues throughout DoD project-based organizations (Darling & Whitty, 2016; Smirnoff & Hicks, 2008). Eckerd and Snider (2017) argued that an AWF program manager is the central role in managing the acquisition of complex weapon

systems. Eckerd and Snider (2017) emphasized that the DAWIA program will only improve in functionality if more program managers are appointed. The acquisition of a weapon system is a project by nature with a range of processes that are synonymous with industry project management standards (Anestis & Kleopatra, 2017; Eckerd & Snider, 2017; Shojaei & Flood, 2017). Therefore, the framework correlation relates to the dynamics of processes that are germane to the organization employing the PM function (Anestis & Kleopatra, 2017; Eckerd & Snider, 2017; Shojaei & Flood, 2017).

Although both functions share similar attributes that require analogous competency development, a key difference between DON AWF DAWIA program managers, and functional project managers, is the focus of application of skill sets (Peters et al., 2017). DON AWF DAWIA program managers support the acquisition of weapons systems that enable USN and USMC warfighters to meet mission requirements (Eckerd & Snider, 2017). On the other hand, the application of PM skills by functional project managers, as they relate to the duties and responsibilities of DON AWF DAWIA program managers, is commensurate with the synthesis of the resources that are required to develop an asset to support a complex weapon system (Anestis & Kleopatra, 2017; Shojaei & Flood, 2017).

Similar Abbreviated Titles and the Resulting Confusion that Stems from the Similarities. The use of abbreviated identification terminology can be confusing to stakeholders because the DON recognizes the AWF program management career field as the PM career field, while project management can also be abbreviated as PM (Eckerd & Snider, 2017; Shojaei & Flood, 2017). However, a key difference is that a DON project manager does not necessarily have to meet DAWIA requirements if the position does not directly support the acquisition of a weapon system (Anestis & Kleopatra, 2017; Peters et al., 2017; Shojaei & Flood, 2017). In the

latter example, a DON project manager who supports the acquisition of weapons systems is likely to have a DAWIA program management professional certification requirement in addition to commercial professional certifications (i.e., if such a requirement is found to be necessary by the employing organization; Eckerd & Snider, 2017; Shojaei & Flood, 2017).

HRM Correlation to DAWIA. With an iterative and adaptive education, experience, and training requirement for each career field certification, DAWIA has formed the way for education, experience and training to be standardized for DON AWF employees (Smirnoff & Hicks, 2008). Given that a primary function of employed HRM tools and techniques is to develop teams, having a dedicated human capital management resource is vital (Darling & Whitty, 2016). Such human capital management resources must be cognizant of all matters related to the development of the AWF (Darling & Whitty, 2016). This is because HR practitioners work to implement, manage and sustain DAWIA AWF career field certification requirements in order to enable the functions that develop the required competencies for a required certification (Darling & Whitty, 2016). An example of the aforementioned type of human capital management resource is a HR specialist or HR generalist who generalizes in training and development of workforce employees.

According to Medina and Medina (2017), learning is essential in knowledge-intensive organizations, such as DON acquisition mission-oriented organizations, and that is where HRM tools and techniques have a role in the facilitating the success of those organizations. To professionalize a position normally involves the development of KSAs that are applicable to the job via professional certification (Blomquist et al., 2018). Pursuing and attaining a professional certification can satisfy a need for achievement through self-development (Blomquist et al., 2018). According to Nguyen and Hadikusumo (2018), the frequency of project team

development can also be extended by improving project managers' competency of HRM tools and techniques.

The Problem

Although DAWIA enables the development of a specialized, professional AWF, it conversely has exacerbated cost growth in weapons systems contracts (Ritschel, 2012). Smirnoff and Hicks (2008) emphasized cost growth and overruns in the acquisitions of major DON weapons systems have been a source of substantial policy concern for over three decades. Ritschel (2012) consented that even though DAWIA has enhanced the quality, expertise and professionalism of DON's acquisition workforce, there are negative findings regarding the effects of DAWIA. These effects relate to cost growth fallacies that do not reflect positively on the design, implementation, and management of DAWIA (Ritschel, 2012). Ritschel (2012) also insisted that beyond the inefficiencies of the DON's AWF, DAWIA has also had a negative impact on cost growth for many other DoD acquisition mission-oriented organizations throughout the United States. This continues to underscore a need to improve the effectiveness of how HRM tools and techniques are employed to support the Nation's warfighters.

Recognizing the Problem. A contribution to the ineffectiveness of DAWIA to mitigate inefficiencies, such as cost growth, is management incompetence (Eckerd & Snider, 2017). Eckerd and Snider (2017) recognized the extent to which managerial competence levels contributes to ineffective efforts to measure the performance of the DON AWF, and their complex efforts to acquire weapons systems. This matter is clearly a concern that underscores a need to infuse HRM practices (e.g., performance management) to enhance the ability for DAWIA AWF employee development (Eckerd & Snider, 2017). This can be accomplished through HRM tools and techniques that support the integration of DAWIA into DON acquisition

mission-oriented organizations (Eckerd & Snider, 2017). Given the apparent lack of effective management of weapons systems acquisition projects, a focused infusion of HRM tools and techniques into the management of DAWIA is necessary (Eckerd & Snider, 2017). An infusion of HRM tools and techniques are essential in order to measure and assess the effectiveness of DON AWF employees, and their complex efforts to acquire weapons systems (Eckerd & Snider, 2017).

The Concept of Project Management

The concept of PM reflects the “temporariness” of a set of actions to reflect a task with a designated end (Momeni & Martinsuo, 2018; Söderlund, 2011, p. 186). Mavi and Standing (2018) emphasized the importance of project efficiency when it comes to project success. Chofreh et al. (2017) suggested that the application of PM concepts and methodologies has added significant value in the improvement of the overall competitive advantage, efficiency, and performance for an organization for many project-based organizations.

Darling and Whitty (2016) emphasized that some characteristics of positive project performance are: commitment, competence, empowerment, feedback, individual goals, information, leadership, material resources, mission clarity, organization support, rewards, satisfaction, team assessment, team coordination, and team unity. Formal feedback and evaluation tools for monitoring and controlling relationship-management strategies and processes are also important for continuous process improvement (Ershadi et al., 2019). Each of the aforementioned competencies are paramount for project team members to continuously develop in order to ensure the success of projects they commit to (Darling & Whitty, 2016; Ershadi et al., 2019).

Project-Based Organization. To manage multiple projects to meet strategic goals, project-based organizations may compound projects into manageable layers (i.e., portfolios, programs, and projects) in order to allocate and control resources (Shojaei & Flood, 2017). Whereas portfolios exhibit the complexity of organizational objectives, programs help to consolidate the projects (Shojaei & Flood, 2017). Ekambaram et al. (2018) professed that project settings are stages for managing ambidexterity in relation to dynamic project capabilities. Leadership within project-based organizations that are capable of capitalizing off of project team ambidexterity as a lesson learned deliverable is contingent upon a project manager's ability to recognize current capabilities and exploration of new opportunities (Jørgensen & Becker, 2017). Therefore, a project-based organization environment that is more predictable through recognition of project team ambidexterity, is likely to oblige less stringent project monitoring (de Rooij et al., 2019).

Baker et al. (2019) suggested that project-based organizations often face the problem of skill shortages. Project-based organizations may have to limit projects if skills to facilitate local projects become limited and are unavailable for work on projects (Fernández et al., 2017). By implementing HRM tools and techniques project managers can help to improve project-based organizational performance that is linked to skills shortages (Fernández et al., 2017).

Ferraris et al. (2019) emphasized that internal human capital can be optimized when managed based on an HRM system of tools and techniques that follows a single overall organizational strategy. This is because HRM tools and techniques can be deployed for ambidextrous work within milieus settings where different project team member engagements occur via either explorative or exploitative project work (Ferraris et al., 2019). The utility can be

found in ambidextrous work by enabling project team members to continuously develop their PM related competencies whilst performing project work simultaneously (Ferraris et al., 2019).

Project Manager. A competent project manager is essential to project success (Nguyen & Hadikusumo, 2017). A project manager may have the difficult task of assigning project team members to a variety of projects with varying deliverable dynamics (Anestis & Kleopatra, 2017). Therefore, it is necessary for project managers to be competent in their ability to assign project teams (Anestis & Kleopatra, 2017). As such, in order to successfully manage the aforementioned complex projects, project-based organizations must enable project managers to employ HR practitioners who can lead and manage the development of project team members' KSAs (Chofreh et al., 2017). Chofreh et al. (2017) advocated that doing so will enable project managers to fulfill any requirements to implement the expectations that project stakeholders expect throughout a given project lifecycle.

In order to remain effective at delegating tasks to project team members, and communicate with HR practitioners, project managers should also learn to effectively use HRM tools through modern information technology (Yang & Huang, 2016). As an example, this can be realized through the implementation of ERP technology to assist in the management of resources (Plaza, 2016). Yang and Huang (2016) found that in order to support communication and cooperation between project team members, as well as with HR practitioners, project managers should unremittingly adapt to continuously changing information technology apparatuses so as to ensure that project assignments are being acknowledged accordingly as they are assigned to project team members, as well as when support from HR practitioners is necessitated.

Recognizing the Stress Associated with Being a Project Manager. According to Anestis and Kleopatra (2017), project managers often face difficulties when it is required for them to reassign tasks to project team members. Part of a project manager's stress derives from the potential instability of factors that can impact a project (An et al., 2019). In particular, project managers stress factors are relative to the problems that are formed as a result of their characteristics and competencies which is indeed reflective of the HRAP theoretical underpinning (Bouajaja & Dridi, 2017). Those factors could imply the instability of job uncertainty and an unstable work-life balance that can occur throughout a project; in particular, it is especially noticeable during the end of a project (An et al., 2019). However, project managers who cross-train leadership functions with project team members secures assurance of project success because the aforementioned stress factors can be delegated to those project team members who are competently capable of taking on such roles in support of their project manager (An et al., 2019; Scott-Young et al., 2019).

Project Risk Management through Effective Project Team Management. To sustain functionality Chofreh et al. (2018) suggested that a value-based discussion with project team members is essential. Project value-based meetings systematically ascend to conversations that speak about strategies that are designed to embed sustainability into project value chains of activities (Chofreh et al., 2018). Project value-based meetings are also essential in identifying and reducing project related risk (Chofreh et al., 2018). According to Chofreh et al. (2016), taking a proactive approach to project risk management through proactive planning and value-based meetings can aid project teams in the avoidance of any potential problems during project implementation.

Project Team. Batistič and Kenda (2018) advocated that project team members can have a varying strategic value for their organization. A project team that has collectively gained experience in performing project work is more than capable of using existing knowledge as a tool to guide their actions (Popaitoon & Siengthai, 2014). As well, gaining experience and knowledge is fundamental for project teams to invent new ways of working in order to more effectively carry out specific project related work (Popaitoon & Siengthai, 2014). As such, project team oriented working environments enable project-based organizations to prosper in multifarious and dynamic environments via knowledge sharing amongst project team members (Baker et al., 2019).

Having project teams share knowledge with other project teams, via value-based meetings to discuss project risk factors, have many benefits that can reduce project risks (Ekambaram et al., 2018). The aforementioned benefits can include reducing the risks associated with varying levels of effectiveness pertaining to how HRM tools and techniques are employed (Ekambaram et al., 2018). As well, the associated time and costs that are related to the development of new project related knowledge transfer apparatuses, that stem from varying levels of effective HRM tools and techniques employment, can be mitigated (Ekambaram et al., 2018).

Project Stakeholders. If project stakeholders' expectations are not met then complications can arise for a project (Wu et al., 2018). Therefore, it is imperative that project managers utilize their tools (e.g., HRM) to manage project stakeholder expectations (Wu et al., 2018). The more stakeholders involved in a project the more uncertainty (e.g., confusion, liabilities, opportunities, risk, etc.) that comes with project stakeholder expectations (Wu et al., 2018). However, Ershadi et al. (2019) emphasized a need for concentration on project

stakeholders' expectations, because project initiatives, must have a positive relationship with respect to how stakeholder satisfaction will be met.

The Concept of Human Resource Management

Guinan et al. (2019) recognized that the planning, estimation, acquisition, development, management, and control of project teams can be difficult because of the complexity that is inherent with the task of synthesizing multiple disciplines, roles, and perspectives as they relate to a given project. According to Pournader et al. (2015), project managers must focus heavily on project functions (e.g., schedule management, budget management, and risk management). However, project managers often do not focus enough on implementation, employment, and management of the HRM tools and techniques to develop, as well as manage, project teams (Pournader et al., 2015). This is largely in part due to project managers not having a comprehensive understanding of the utility of, or how to effectively employ, HRM tools and techniques (Keegan et al., 2018).

Human Resources Practitioners. A general concern of HRM is how and why organizations can achieve and maintain competitive advantage by enabling human capital to function effectively (Batistič & Kenda, 2018). Ferraris et al. (2019) implied HR practitioners are the conduit between project managers, project team members, and executive level management. Leite et al. (2017) linked the aforementioned project stakeholders via HR practitioners' development of HRM tools and techniques. According to Ferraris et al. (2019), HRM tools and techniques can have positive effects on project-based organizational productivity and therefore enhance financial performance and reduce project risk. As well, effective use of HRM can offer assurance to the success of a project by ensuring project team members are effectively used; furthermore, reducing project risk (Ling et al., 2018). Although Leite et al. (2017) insisted that

mainstream HRM literature continues to pay much greater attention to the management of HR in routine organizations, there is good reason, given the utility of HRM within PM, for a need to steer the focus on scholarly literature to the management of HR within projectized organizations.

Human Resources Allocation Problem. Practical application of the solution to the human resources allocation problem can be located in different areas of PM (Djedovic et al., 2018). Bouajaja and Dridi (2017) suggested human resources allocation is largely associated with scheduling related problems. Nevertheless, restricted implementation and employment of HRM tools and techniques are the principal dynamic that affects project resource scheduling (Lin et al., 2018).

Bouajaja and Dridi (2017) also emphasized the complexity of human resources allocation problem is due to the human characteristics (e.g., communication, goal setting, organization, etc.) of project team members that are slated for project assignment. However, Djedovic et al. (2018) found there have been efforts to solve the human resources allocation problem by implementing PM software that can optimize aspects of PM via critical paths analysis. Furthermore, cross-functional project team members can aid in the input of critical paths analysis because their understanding of project functions can be triangulated in order to resolve human resources allocation problem (Pak et al., 2016).

Nonetheless, it can be very time-consuming and potentially impossible to locate the optimum distribution of human capital through manual changes to resource allocation plans (Djedovic et al., 2018). However manageable, the problem can be especially difficult if established processes are very complex and a high volume of resources are available to consider (Djedovic et al., 2018). Therefore, the allocation of human capital should begin with an analysis

of critical path tasks so as not to impact the total schedule duration that is planned for a project (Celkevicius & Russo, 2018).

The Need to use the HRM Concept to Diversify Project Teams. Project based organizations also benefit by utilizing HR practitioners to assist project managers in developing and managing diverse project teams (Baker et al., 2019). However, those efforts may not be initiated due to a potential unwillingness by organizational leaders to diversify project teams (Baker et al., 2019). Different human characteristics (e.g., communication, goal setting, organization, etc.) require different work settings (Zennaro et al., 2019). Moreover, HR practitioners can support project managers and their project teams by engaging in diversity assessments to mitigate matters surrounding project ergonomics (Zennaro et al., 2019). HRM tools and techniques can support project managers who rely on social dimensions in order to explore and exploit inter-organizational partnerships; in particular, amongst various project teams (Ferraris et al., 2019). Therefore, there is a need to inform project managers and project team members about the aspects of diversity that can transpire when working in various project team formats (i.e., physical project teams or virtual project teams; Zuofa & Ochieng, 2017).

HRM Tools and Techniques. HRM tools and techniques are the exclusive methods to express and enforce the organizational policies (Momeni & Martinsuo, 2018). HRM tools and techniques are essential for project managers to initiate, plan, execute, control, and close projects with both physical and virtual project teams (Zuofa & Ochieng, 2017). According to Ershadi et al. (2019), soft factors such as HRM tools and techniques have substantial effect on stakeholder behavior through innovation and quality improvement. As an example, Demirkesen and Ozorhon (2017) posited that HR practitioners play a critical role in providing project teams with feedback about project team member performance, as well as being sensitive towards employment

relationships in order to emphasize workplace safety for the wellbeing of the project team members. According to Becker and Smidt (2015), the risks that are innate to ineffective implementation and employment of HRM will deliver a vital, value realization opportunity for managers to consider the critical nature of human factors within their active projects.

HRM Tools. There are several HRM tools such as selection and onboard management tools, performance management systems, training apparatuses, pay and reward systems, and exit process tools (Fernández et al., 2017). The exploitation of HRM tools can emphasize the ambidexterity of HRM as it relates to projectized organizations, with a need for project oriented HRM functionality; operational organizations, with a need for operational HRM functionality; as well as matrix organizations that yields a need for both configurations of HRM tool functionality (Jørgensen & Becker, 2017). Moreover, the ambidexterity of HRM tools will vary in functionality between projectized and operational organizations because each functional area necessitates varying tools to enable HR practitioners to be in a role to support the predicated organizational environment (Jørgensen & Becker, 2017). Nonetheless, a matrixed organization is also likely to realize fluctuating roles for the implementation of HRM tools that is contingent upon the dominant functional environment requirement (Jørgensen & Becker, 2017). Therefore, project managers need to realize that the aforementioned tools are capable of flexing policy as required in order to meet the needs of the organizational setting as a way to ensure the continuous functionality of human capital management (Fernández et al., 2017).

HRM tools are found to contribute to project success by facilitating knowledge management capabilities to improve project-related knowledge transfer through training and development via HRM tools that are centric to career development (Popaitoon & Siengthai, 2014). Medina and Medina (2014) also emphasized the utility of HRM tools for measuring

project team performance and overall long-term commitment for those projects that can last for extended periods of time. Popaitoon and Siengthai (2014) emphasized a need for project managers to consider how effectively HRM tools are employed to support their projects. This is because those HRM tools that specifically address recruitment, selection, appraisal, development, and rewards for project team members will vary from project to project (Popaitoon & Siengthai, 2014).

HRM Techniques. HRM techniques that exclusively support PM differ from practices in typical HRM operational models of management because the design of HRM techniques to facilitate PM will vary between individual projects (Popaitoon & Siengthai, 2014). HRM techniques that collectively align with project team member characteristics, as well as project team structure and composition, support the recognition that HRM techniques can be ambidextrous in order to support projects and operational initiatives by recognizing current capabilities and exploring of new opportunities (Jørgensen & Becker, 2017; Popaitoon & Siengthai, 2014). Furthermore, this viewpoint establishes the ability for HRM techniques to support matrixed organizations, whether the emphasis be operational or projectized (Jørgensen & Becker, 2017). Having an understanding of the duality of HRM, as is related to PM, could help project managers to understand which, if any, HRM techniques are most conducive to projects at the given time a project is underway (Hong et al., 2014). This perspective is indicative of the fluidity that is necessary of HRM to support the indefinite dynamics that are commensurate with PM as is relevant to the formality of a given project (Hong et al., 2014).

Principal HRM techniques within a projectized organization include position allocation, staffing, recruitment, development, employee relations, assessment, and retention of project team members (Farashah et al., 2019). According to Popaitoon and Siengthai (2014), HRM techniques

that contribute to project success can develop a project team's required KSAs. As well, HRM techniques can motivate project team members via project performance appraisals that can allude to both monetary and non-monetary rewards (Popaitoon & Siengthai, 2014). However, HRM techniques are most effective when they markedly promote recognition for project team members' abilities, level of commitment and personal motivation to complete their assigned project, as well as their overall effectiveness in completing their projects (Popaitoon & Siengthai, 2014).

Ineffective Integration of HRM Tools and Techniques to Support Project Team Member Selection. The selection of a potential project team member is highly perplexing because an individual's level of competency in any skill set can be challenging to measure without the use of concept of competency analysis techniques (Farashah et al., 2019). Therein lies a problem; although there have been efforts toward creating reliable new HRM tools and techniques for project team selection, staffing, and competency assessment, Farashah et al. (2019) found that HR practitioners occasionally use shortcuts. Furthermore, Rahmanniyay and Yu (2019) recognized that the proper use of HRM tools and techniques to select project team members is a great challenge for project managers and HR practitioners in project-based organizations. This is likely because the process of project team member selection involves requiring project managers to work collectively and cohesively with HR practitioners to evaluate various criteria for project team member candidates, education, experience, and relatability (Farashah et al., 2019). A lack of cohesion and communication between project managers and HR practitioners is likely to be a catalyst to the problem of project team member selection (Farashah et al., 2019; Rahmanniyay & Yu, 2019).

Human Resources Allocation Problem Theory

The HRAP theory helped to discern the way input from the scholarly SMEs related to how and why a project managers level of effectiveness to allocate and employ HRM tools and techniques, can affect project teams within acquisition mission-oriented organizations of the DON. The perspectives of scholarly SMEs were then synthesized through the lens of a constructivist viewpoint to develop themes that were underpinned by HRAP theory. Their perspectives were synthesized in order to relate to how and why the effectiveness of how HRM tools and techniques were allocated in support of PM, during the PRM construct processes. Furthermore, HRAP theory framed the way in which interview questions were developed from the viewpoints of scholarly SMEs that are observed throughout this literature review.

The Construct of Project Resource Management

An et al. (2019) suggested that in project-based organizations little attention is paid to the well-being of project teams because of the potential to impact resources. Nonetheless, project efficiency is achieved through effective use of resources management functions such as HRM tools and techniques (Mavi & Standing, 2018). As can be seen in Figure 1, there is a complex network of scaffolding that links the HRM and PM, and that scaffolding framework is PRM. With respect to managing and developing project teams, Demirkesen and Ozorhon (2017) implied that while employing HRM tools and techniques the following factors are critical: Analysis of workforce staffing needs; establishment of reward systems for project personnel; assessment of contribution, performance, and commitment to development initiatives; as well as retention initiatives, which also may be considered a catalyst for some developmental employee programs. To facilitate this need, HR practitioners promote favorable treatment of employees via: Praise, fairness, supportive supervision, and developmental opportunities as a method to

improve employee well-being, decrease attrition rates, encourage workforce development, and improve project team member performance (Shanock et al., 2019).

Plan Resource Management. Zennaro et al. (2019) supported the realization that HRM tools and techniques are becoming more relevant to PM resource planning processes. According to Leite et al. (2017), planning to share human capital from various projects enables organizations to allocate and use resources more effectively, thus using less resources on other projects. However, it should be noted that HRM costs (e.g., training costs and wages) constitute a major portion of project expenses (Rahmanniyay & Yu, 2019). Shared human capital that perform project work across multiple projects can reduce the costs associated with training and development (Rahmanniyay & Yu, 2019). This can be achieved by enabling HR practitioners to ensure the same training and development apparatuses do not cross multiple projects (Rahmanniyay & Yu, 2019). However, planning must be closely aligned to the strategies that are implemented in order to control costs by ensuring project team members do not double up on training as they work on multiple projects (Leite et al., 2017).

PRM planning costs associated with a project are often managed by enterprise resource planning (ERP) tools in order to control costs (Plaza, 2016). Abu-Hussein et al. (2016) suggested that HRM tools and techniques often do have major effects on how and why ERP is utilized (e.g., work breakdown structures to monitor timecards of project team member work hours). Another essential function of ERP is to assess project team development and training needs (Plaza, 2016). ERP can be used to budget the funding that is required to be used to train and develop project team members (Plaza, 2016). Enterprise information system (EIS) tools are also used to plan project human capital resources (Mesároš et al., 2019). EIS tools are often designed in a way to present HR practitioners with the functions that are necessary to process HRM and

PM related data (Mesároš et al., 2019). However, it is ultimately up to the project manager to effectively employee HR practitioners to utilize ERP and EIS tools to effectively plan, estimate, acquire, develop, manage, and control project team members' competencies (Abu-Hussein et al., 2016; Mesároš et al., 2019; Plaza, 2016).

Project Team Planning. To plan for and make changes to the organizational structure of a project team, there is a need for project managers to address logistical requirements, technical requirements, as well as change management requirements (Karambelkar & Bhattacharya, 2017). This is necessary in order for project managers to address all human aspects of their project team members before making such change (Karambelkar & Bhattacharya, 2017). According to Ekambaram et al. (2018), a flexible configuration of people and projects helps to provide opportunities for project teams to overcome innovation and organizational change barriers so that requirements from customers can be responded to in a timely manner. However, if project resources such as human capital are restricted, poorly managed, and/or poorly planned, then projects may not finish on time and within budget as originally planned (Lin et al., 2018). Therefore, efforts to plan and allocate human capital should consider delays in the entire project when there are resource gaps in desired skills to allocate across project work packages (Celkevicius & Russo, 2018). As well, consideration for potential project delays is reason for project managers to consider taking a more comprehensive approach to risk assessment and planning by effectively employing HR practitioners to mitigate the risks associated with project team planning (Becker & Smidt, 2015).

Estimate Activity Resources. Competency modeling can help to refine and improve how HRM can be employed within the context of PM (von Meding et al., 2016). By capitalizing on the functionality of HRM tools and techniques, human capital as a resource can be effectively

estimated via resource leveling (von Meding et al., 2016). Resource leveling is a process of reducing the total cost associated with a project by redistributing resources to activities to the most cost-effective position within a project or multiple projects (Celkevicius & Russo, 2018). According to Celkevicius and Russo (2018), with respect to human capital, this approach to project resource estimation is primarily, to estimate and sustain hiring requirements and human capital attrition for short term durations throughout iterative parts of project lifecycles. However, a lack of human capital for carrying out critical path tasks may generate a delay in a specific task related activity, further delaying projects as a whole (Celkevicius & Russo, 2018). Therefore, effectively estimating activity resources via resource leveling is essential in ensuring project teams are adequately staffed throughout a project.

Project Team Staffing. A process to measure project complexity, as it relates to staffing requirements, comprises of measuring the number of participants within inter-organizational relationships as they are associated with a given number of tasks that are germane to chartered projects (Schneider et al., 2017). Zhang and Tian (2012) inferred that project managers should engage project management via systematic lens, method, and theory that sees a project as being a continuous endeavor that is consistently under the constraint of limited resources. The initial scheduling of project task assignments (i.e., to adequately staff project teams) via manual task scheduling usually consumes a substantial amount of project managers' time and effort (Chen et al., 2017). Therefore, these efforts can necessitate a considerable amount of project work experience in the project schedule management knowledge area (Chen et al., 2017). These efforts require for project managers to have extensive knowledge of the functionality of HRM tools and techniques to schedule human capital for project activities (Chen et al., 2017).

Due to the aforementioned constraints, the need for HR practitioners to staff and onboard project team members quickly is very relevant for projects (Batistič & Kenda, 2018). Therefore, staff assignment decision-making needs to be purposed in order to match the available human capital resources with the work package requirements for each project activities (Felberbauer et al., 2019). Optimizing resource assignment can also be a hard task due to the possibility for resources to be allocated simultaneously (Bouajaja & Dridi, 2017). Nevertheless, resource management can be optimized if tools and techniques such as those associated with HRM are effectively employed (Bouajaja & Dridi, 2017).

Acquire Resources. An et al. (2019) implied that due to the potential impact on overhead resources, project-based organizations often tend to focus on the formation of already competent project teams and less on the development of less competent project teams. According to Demirkesen and Ozorhon (2017), there is a strong association between HRM and acquisition related cost management initiatives. The relationships exist because recruiting costs, cost of human capital, and training costs of project team members are strongly linked to cost management activities (Demirkesen & Ozorhon, 2017).

Project managers also frequently face complex management situations because of limited resource availability (Celkevicius & Russo, 2018). A problem associated with project team member hiring is that the process can be expensive due to the extent which some project managers go to outsource recruitment via third-party acquisitions (Rihm et al., 2018). Therefore, Celkevicius and Russo (2018) suggested HRM tools and techniques need to be shared by multiple projects in order to control the costs associated with project team member recruitment. If necessary because specific competencies may often be needed and therefore can cause significant difficulty for resources to be appropriately leveled (Celkevicius & Russo, 2018).

Project Team Member Recruitment. According to Karambelkar and Bhattacharya (2017), the process of onboarding of project team members necessitates communication and collaboration between project managers, HR practitioners, and other project stakeholders. Rahmanniyay and Yu (2019) also emphasized that project team member selection can be challenging because the process may involve the evaluation of multi-complex criteria for project candidates; such as years of education, experience, as well as structured interviews. According to Chen et al. (2017), skill development is another objective that project managers should consider when forming a project team. In addition, the effects of team dynamics germane to teamwork relationships should be considered when analyzing project team skill efficiency (Chen et al., 2017). Chen et al. (2017) also urged for project managers to consider employing various recruitment strategies to cultivate talents in order to establish a talented team, which can limit the risks of brain drain when forming a project team.

Develop Team. Human resources development should not only be seen as tools and techniques to develop project members, but also project teams (Nguyen & Hadikusumo, 2017). Human resource competency development can help project team members, as well as project managers become aware of how HRM tools and techniques can support the project team throughout a project (Nguyen & Hadikusumo, 2017). As an example, An et al. (2019) pointed out that only a few studies have been conducted on the utility of HRM tools and techniques that emphasize the importance for project managers to recognize significant project milestones, such as the project closing phase. Furthermore, An et al. (2019) insisted that project closing phases are a significant point in time within a project for project team member to need transitional development and attentiveness to their well-being.

Pak et al. (2016) emphasized the importance of cross-functional competencies amongst project team members to perform multi-task functions. Felberbauer et al. (2019) emphasized each project can consist of multiple work packages, whereas every work package requires a stochastic amount of effort employed from a specific skillset. Therefore, Multitasking may affect human productivity during projects (Anestis & Kleopatra, 2017). Furthermore, having adequately developed project team members enable project managers to more efficiently manage project resources (Anestis & Kleopatra, 2017).

Project Team Member Training and Development. Darling and Whitty (2016) explained that project teams are made up of project team members with special KSAs that purpose them to achieve project objectives under the direction of a project manager. Providing more formalized training to transfer knowledge can result in overall lower project costs because of more developed competencies amongst project team members (Plaza, 2016). Therefore, for the sake of project sustainment, knowledge sharing and learning across project teams should be considered an important function in the sustainment of project team's autonomous work efficiency (Ekambaram et al., 2018). According to Ekambaram et al. (2018), data collected from projects that accumulate from assessed outcomes that occur throughout a project lifecycle can be analyzed to produce knowledge. That knowledge can be shared and compared to other project data in order to develop improved processes (Ekambaram et al., 2018). Plaza (2016) further suggested that the data can be ascertained from reports that are derivative of ERP tools that are implemented to facilitate the management of project resources. The development and transference of tacit knowledge and other intangible resources usually have an impact on the ability for a project team to sustain their ability to maintain autonomous project performance (Hung, 2017).

The process of developing a project team could be viewed synonymously with developing an organization within an organization, and by default that organization requires the same HRM attentiveness as the part of the organization that is not subject to project management (Bouajaja & Dridi, 2017). HRM has changed from an initial role of managing labor related matters and personnel staffing efforts to a role of improving efficiencies in human capital management strategies (Lee et al., 2018). In order to be productive in this process evolution, Lee et al. (2018) insisted HRM has to adapt to training and development as being a front running instrument of the HR practice. According to Lee et al. (2018), training and development are key factors of business management strategies, such as PM, because the function promotes competitiveness through sustainable development. Lee et al. (2018) advocated the need for executive level management support to enable project teams to function. Lee et al. (2018) suggested that one layer of support that is necessary from executive level management is their emphasis of project team development via training and development initiatives.

Manage Team. According to Jin et al. (2019), strategy is a human activity that is related to human needs, and addresses the necessity for change to the present need for HRM support in order to sustain the project-based organization environment. Notwithstanding, HRM tools and techniques can be fluid in projects if managed appropriately (von Meding et al., 2016). Therefore, project teams build commitment to project efforts as team member relationships are developed (Momeni & Martinsuo, 2018). However, project teams need autonomy to perform their tasks (Ekambaram et al., 2018).

According to Abu-Hussein et al. (2016), HRM is inclusive to all aspects of managing a project team. Anestis and Kleopatra (2017) emphasized that HRM tools and techniques are essential to a project managers ability to manage a project team by assigning multitask work-

package requirements to project team members. However, Batistič and Kenda (2018) argued that HRM does not passably address how and why organizations can manage and differentiate employees in more complex short term projectized activities. Albeit there is one specific universal goal for a project team, and that is to complete the project on time and within budget; nevertheless, each project team member has their own goals to pursue (Medina & Medina, 2017). Nonetheless, Malecic (2017) insisted that in general, a functional system of organizational tasks should encompass a complex variety of concrete systems in order for project managers to effectively manage the delegation of work-package tasks and assess the respective project team members that are relative to a given project.

Project Team Member Assessment. Salovaara and Bathurst (2018) postulated that for the sake of a project team and the associated members, project managers need to consider the social and psychological effects of the systems that are being used to assess their project performance. Such attention should be emphasized because these psychological effects can affect project team member performance (Salovaara & Bathurst, 2018). In some instances, third-party assessors may be employed to remove bias; however, the cost of third-party assessors can be high (Rihm et al., 2018). The cost associated with third-party assessments may implore organizations to require a reduced number of assessors and can thereby affect project cost and schedule management processes (Rihm et al., 2018). Nonetheless, project managers need to remain cognizant that complex rules imposed on assessors, regardless of whether they are internal or third-party, can cause project scheduling problems which is a catalyst for increased project expenses (Rihm et al., 2018).

Abu-Hussein et al. (2016) emphasized that incentives should be always associated with the performance of project team members. However, if used recklessly, motivators such as

incentives gained through competition amongst projects can spell disaster for organizations (von Meding et al., 2016). With this being a possibility, project managers need to be aware that disasters can occur within an organization because important information, that should be fluid across organizational programs or portfolios, may be restricted by project team niches that are caused by irresponsible competition (von Meding et al., 2016). Nonetheless, project team key performance indicators that are used by assessors to extensively measure the performance of projects and project teams will determine whether or not such incentive is merited (Mesároš et al., 2019).

Control Resources. Humans, by nature, tend to follow reasonable management directives, which can be viewed as a failsafe to safeguard project cost strategies, and a measure of quality control throughout the duration of a project lifecycle (Salovaara & Bathurst, 2018). Therefore, project-based organizations should evaluate the overall viability of the project and the resources that are commensurate with the project at the beginning of their projects (Demirkesen & Ozorhon, 2017). This measure of control should help to establish cost management strategies that enable project managers to monitor and control project performance (Demirkesen & Ozorhon, 2017).

Lin et al. (2018) insisted project managers should also focus on resource fluctuations in order to maximize resource utilization efficiency, as well as to mitigate extensive project durations that could affect project performance via unintended scope creep. Virtual project teams whose members come from a mix of cultural orientations, in terms of approaches to problem solving, communications, work ethics can expand the capabilities of a project (Zuofa & Ochieng, 2017). However, project managers need to be cognizant of and control the likelihood of project scope creep (Zuofa & Ochieng, 2017). Nonetheless, various research findings have revealed that

the employment of HRM tools and techniques to support the adaptation to agile HRM methodologies are an efficient way to yield significant advantages in controlling project costs that could fall out of control due to scope creep (Huzooree & Ramdoo, 2015). As well, agile HRM methodologies help project team members to sustain deliverable time-to-market timelines, overall complexity, and quality improvement of HRM tools and techniques over traditional HRM methodologies (Huzooree & Ramdoo, 2015). Furthermore, HRM agility helps to steer project-based organizations to a level of sustainment based on lessons learned towards going agile in software project management (Huzooree & Ramdoo, 2015). According to Huzooree and Ramdoo (2015), project related problems can also be mitigated with agile-driven HRM approaches, which are a departure from plan-driven traditional HRM approaches. Agile HRM and PM are flexible (Kong et al., 2018); furthermore, Kong et al. (2018) attested to the reality that flexibility is an important value-added capability for project team members. Regardless, a transformation from rigidity to agility can be a rather cumbersome feat to accomplish in a short period of time; therefore, project managers will do well to approach such initiatives with strategic caution (Salovaara & Bathurst, 2018).

Project Team Member Retention. Kong et al. (2018) expressed that the sole premise for project human resources management functions is to ensure people with the necessary competencies are on the team and to ensure they are retained and properly managed throughout the lifecycle of the project. Executive level management influence and buy-in to retention initiatives is paramount for HR practitioners' ability to effectively support project teams beyond their respective projects, which is a driver for retention of effective project team members (Lee et al., 2018). Their buy-in supports HRM tools and techniques such as awards, job security, vested training and development and advancement opportunities are keys to retaining project team

members (Kong et al., 2018). In other words, retention of project team members through effectively managed human capital development methodologies can help to enable project team members develop and sustain the knowledge gained, as well as improve overall organizational functionality beyond the scope of PM (i.e., organizational operations).

Related Studies

The search for scholarly literature that was conducive in nature to this case study was conducted within the Liberty University Jerry Falwell Online Library resource. The databases within this resource that were explored to seek and locate scholarly journal articles that are germane to this case study included: APA PsycNET, Cambridge University Press, Creative Commons, Cross Mark, Emerald Insight, Nexis Uni, Pro Quest, SAGE Publishing, Science Direct, Springer Publishing, and Wiley Online Library. Collectively, as outlined in Tables 1 and 2, there were 116 scholarly journal articles, 15 scholarly books, and six publicly attainable federal informational resources were reviewed for this case study; of which, there were 77 scholarly journal articles, four scholarly books, and two publicly attainable DON operating guides were reviewed for this literature review. In addition, an operating guide that pertains directly to the DAWIA, as well as the PMBOK Guide (2017) were reviewed in support of this literature review.

Table 1*Total Scholarly Sources Reviewed in Case Study*

Literature Type	Older than 2015	2015	2016	2017	2018	2019	2020 or Newer	Total Reviewed	Percentage Reviewed
Peer Review Articles	28	10	12	26	23	16	1	116	84.7
Books	9	2	1	1	2	0	0	15	10.9
Other	3	0	1	1	0	1	0	6	4.4
Total	40	12	14	28	25	17	1	137	100
Percentage	29.2	8.8	10.2	20.4	18.3	12.4	0.7	100	

Table 2*Total Scholarly Sources Reviewed in Literature Review*

Literature Type	Older than 2015	2015	2016	2017	2018	2019	2020 or Newer	Total Reviewed	Percentage Reviewed
Peer Review Articles	8	8	8	19	19	15	0	77	92.8
Books	1	1	0	0	2	0	0	4	4.8
Other	0	0	0	2	0	0	0	2	2.4
Total	9	9	8	21	21	15	0	83	100
Percentage	10.8	10.8	9.7	25.3	25.3	18.1	0	100	

Anticipated and Discovered Themes

Creswell (2014) acknowledged that as research is planned themes will not be known. However, Creswell (2014) insisted that as research continues themes will begin to arise, which will eventually guide the development of the research as it progresses. With respect to case studies, Yin (2018) implied that as patterns in research emerge characteristics of research begin to form. Characteristics of this literature review have aided in the formation of the following three themes that will guide the research through the steps that proceed the exploration of the effects of project managers' use of HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams within acquisition-mission oriented organizations of the DON.

Anticipated Themes. HRM is fundamental to PM (Jin et al., 2018). Therefore, three themes were anticipated to populate this research. Considerable research recognizes that HRM holds a critical role in the success or failure of a project (Celkevicius & Russo, 2018). The critical role of HRM lends to the anticipation of themes regarding project process efficiency that is contingent upon HR to retain a level of project team effectiveness that is necessary to manage a project efficiently.

Anticipated Theme One. Ling et al. (2018) postulated that effective employment of HRM tools and techniques can guarantee that project team members are enabled to perform project work efficiently; furthermore, project risk is reduced and the return on investment maximized. Shaw (2017) supported the influence of HRM tools and techniques on PM practices and strategies by emphasizing that literature relative to HR identifies various HRM tools and techniques that can contribute to the exploration of methodologies that may develop improved

PM practices. Nonetheless, developing project teams would do well to establish best practices so that follow-on project teams can follow by example (Pak et al., 2016).

Anticipated Theme Two. According to Shaw (2017) projects can be conduits for sharing knowledge across an organization. Moreover, different project management process factors affect the outcome of project successes, especially in project teams that have previously completed projects together (Nguyen & Hadikusumo, 2017). Project knowledge sharing via lessons learned is an important role for project managers to facilitate amongst organizational stakeholders (Shaw, 2017). Therefore, the second anticipated theme was that HRM tools and techniques are considered viable functions of PRM that are necessary to enable project managers to share knowledge via training and development opportunities.

Anticipated Theme Three. The overarching perception gained from conducting this literature review is that the problem of ineffective use of HRM tools and techniques to facilitate projects exists throughout many other types of organizations beyond the DON or DoD. Nonetheless, enabling project managers to gain a clearer understanding of how to effectively implement and employee HRM within their projects is essential to the success of their projects. Therefore, it is thematically anticipated that the results of this research will add value to the PM and HRM practices because there is a general perception that although the utility of HRM tools and techniques are not fully understood, HRM tools and techniques are advantageous to all project stakeholders in one or more forms.

Themes Discovered within the Literature. HRM, with the right attitude and correct behavior, is considered to be one of the most important asset in a project-based organization; therefore, strategies should result in tactics that effectively allocate HRM tools and techniques as needed (Huzooree & Ramdoo, 2015). HR practitioners should align the employment of HRM

tools and techniques (recruitment, training, performance monitoring, selection, participation, organizational culture, and organizational management) with project-based organizational goals (Fernández et al., 2017). As well, successful projects, when scheduled, budgeted (e.g., project team member wages), sourced (i.e., project team members recruited and staffed into appropriate positions), and innovated (e.g., with innovative information technology and support by agile HRM methodologies), tend to perform efficiently (Hung, 2017). Therefore, review of the scholarly literature aided in the development of three themes that were aimed to support the continued development of this case study. Theme one related to HRAP theory to discern the HR allocation strategies that contribute to the problems associated with varying levels of effectiveness relating to how HRM tools and techniques are employed in support of PM during PRM processes. Theme two is guided by HRAP theory in order to discern how and why project managers effect the allocation of HRM tools and techniques. Furthermore, theme two recognized how the allocation of HRM tools and techniques can contribute to PM related problems that stem from the level of effective use during PRM processes. Theme three is guided by HRAP theory to distinguish how and why lessons learned about problems associated with the effectiveness of HR allocation are not realized by project managers, project team members, HR practitioners, and executive level management. Furthermore, theme three addressed the need to change the way HR is allocated by project managers to improve the effectiveness of the employment of HRM tools and techniques to support project teams.

Theme One. This research suggested that the level of effectiveness associated with a project team's performance can stem from communication issues (Hung, 2017). Tansley et al. (2013) argued that project teams often struggle to be fully effective because of the unmet expectations that reflect HR practitioners' inability to effectively provide HRM related benefits

for project team members due to ineffective communication. As well, Tansley et al. (2013) also implied that project teams can struggle if they feel as if though HR practitioners can disrupt the flow of project work because of an overabundance of HRM related policies (e.g., having to participate in training too often throughout a project lifecycle). Moreover, Tansley et al. (2013) insisted that project teams often dissent from HRM integration if HR fails to adapt to a projectized work format in lieu of an operationally repetitive format. By not recognizing the opposition amongst project team members and HR practitioners, that is a product of miscommunication, lack of communication, and/or the communication of unsuitable strategies, the disconnect between those project stakeholders will continue to expand (Aust et al., 2015). Aust et al. (2015) insisted that there is a strong need to develop a refined understanding of the impact that occurs from a lack of cohesion that stems from communication issues between project managers, HR practitioners, and organizational executive level management. Therefore, the first theme discovered within the scholarly literature that is consistent in this case study is that efforts to communicate effectively are catalyst to the ineffective implementation and employment of HRM that is facilitated for project teams within acquisition mission-oriented organizations of the DON.

Following the footprint of HRAP theory, it is appropriate to recognize that social network optimization has become key to an improved allocation of HRM tools and techniques to support project teams (Hu, 2019; Lin et al., 2018; Matta et al., 2015). Moreover, the complexity of a given project team directly relates to the complexity of the corresponding project network (Scott-Young et al., 2019). Batistič and Kenda (2018) argued that the socialization of new project team members might be dependent on work task complexity, which touches upon work attributes such as task, job, and social and organizational environment. As well, project managers could

consider using social network analysis tools to evaluate and learn from the dynamics that are synonymous with project stakeholder expectations in order to gain awareness of stakeholders' intentions for the project (Basten & Haamann, 2018; Berta et al., 2015; Wu et al., 2018). This effort can be seen as necessary because of the unlimited effect that the level of influence project team members' and HR practitioners' behaviors can have on project performance (Shaw, 2017). Therefore, there is a need to understand how and why the behaviors of the aforementioned internal project stakeholders within acquisition mission-oriented organizations of the DON, can affect a project managers ability to effectively employ HRM tools and techniques in support of their projects during PRM processes.

Theme Two. Scott-Young et al. (2019) emphasized that PM literature has concentrated predominantly on vertical-power of a project manager and not so much on the complexity of a project team and how to manage project team members efficiently via effective allocation and employment of HRM tools and techniques. For example, HRAP theory can expose problems related to schedule and cost overruns on projects, which can partly be attributed to lapses in appropriate use of HRM tools and techniques because project team members may not be aware of essential aspects of a project that is impacted by HR influence (Hu, 2019; Jin et al., 2018; Matta et al., 2015). Therefore, HRAP theory ascertains the impact of project managers' and HR practitioners' behavioral influences as they are related to HRAP theory.

Having an understanding of how the aforementioned behaviors and HRAP can help to improve a project manager's understanding of how to employ HRM in order to improve overall PM schedule management and relative costs (Basten & Haamann, 2018; Bouajaja & Dridi, 2017; Jin et al., 2018). Therefore, the second theme discovered within the scholarly literature that is consistent in this case study is that a lack of project managers' understanding of the full utility of

HRM tools and techniques and how they should be effectively allocated in order to support project teams via PM during PRM processes. Furthermore, this lack of understanding underscores the need to recognize how and why ineffective allocation of HRM, in order to facilitate project teams within acquisition mission-oriented organizations of the DON, can affect the acquisition of weapons systems for USN and USMC warfighters.

Theme Three. A combination of low project team maturity, recruitment, and retention can have a significant impact on project team members' ability to gain the competencies that are necessary to work in mature projects over time (Medina & Medina, 2017). Hence, coordination between executive level management, project managers, and HR practitioners is vital to the success of project managers (An et al., 2019). Lee et al. (2018) professed that it is absolutely essential for executive level management to support project teams by buying into the HRM tools and techniques that can sustain the aforementioned competency development for project team members. Executive level management are also essential in aligning support systems to develop project teams (Mavi & Standing, 2018). Therefore, executive level management should highlight the utility of HRM in order enable project team development (Lee et al., 2018).

Coelho et al. (2015) argued that it is important for executive level management to understand how and why HRM is perceived by individual project team members in order to comprehend how HRM is linked to organizational performance. Coelho et al. (2015) demonstrated that if executive level management focused on expressing the consistency, distinctiveness, and fairness of how HRM tools and techniques can benefit project teams if implemented and employed effectively, a strong organizational climate may form that encourages project team members to demonstrate cohesiveness within the organization. Coelho et al. (2015) also insisted that consistency from leadership is key to sustaining cohesion;

therefore, it is apparent that executive level management can play a significant role in how effectively HRM is being employed to support project teams.

Influence of executive level management can remain consistent because portfolio and program management hierarchies enable executive level management to remain cognizant of how HRM tools and techniques are allocated across projects (Shojaei & Flood, 2017). This reality encumbers the need to recognize how HRAP theory can be employed to ascertain how and why stakeholders such as executive level management facilitate the allocation and integration of HRM tools and techniques to enable project managers to plan, estimate, acquire, develop, manage, and control their project teams (Bouajaja & Dridi, 2017; Hu, 2019; Matta et al., 2015). Therefore, the third theme discovered within the scholarly literature that is consistent in this case study is that engagement by executive level management during projects has an effect on how project managers employee HRM tools and techniques in order to support project teams within acquisition mission-oriented organizations of the DON. Furthermore, there is a need to learn how and why the level of commitment of project team members, HR practitioners, as well as executive level management within acquisition mission-oriented organizations of the DON can effect a project managers' ability to effectively employee HRM tools and techniques in support of their projects during PRM processes.

Themes Discovered during the Analysis of Participant Interview Data. During the analysis of interview participant responses there were three theme discovered. These themes were correlated with the anticipated themes and the themes that were discovered during the review of scholarly literature. In comparison each of the themes are relative to the anticipated themes and the themes that were discovered during the review of scholarly literature.

Discovered Theme One. The most prominent participant data resulted in a primary theme that suggested a productive project manager and HR practitioner relationship is central to effective PRM processes, policies, and procedures. The coded emergent ideas that codified this discovery are: PM and HRM relationships, PM commitment to using HRM tools and techniques, communication issues, HR competence, project managers effecting the use of HRM tools and techniques, and effective use of HR to manage resources. This discovered theme is relative to themes one and two that were discovered during the review of scholarly literature because there is an implication of cross-functional knowledge transfer being inhibited due to a lack of communication between DON project managers and DON HR practitioners.

Discovered Theme Two. The other prominent participant data resulted in a primary theme that suggested there is minimal teamwork between DON project managers and DON HR practitioners to form effective PRM processes, policies, and procedures. The coded emergent ideas that codified this discovery are: acquire, control, develop, lack of project management knowledge, manage, project team satisfaction, ineffective use of HR to manage projects, integrate PM and HR, and project managers' acceptance of HR. This discovered theme is also relative to themes one and two that were discovered during the review of scholarly literature because there is an acknowledgement that a project manager's lack of understanding of HRM tools a techniques are a catalyst to their ineffective use to plan, estimate, acquire, develop, manage, and control project teams so that their projects can be completed efficiently.

Discovered Theme Three. The participant data also resulted in a primary theme that suggested there are limited resources to enable productive project manager and HR practitioner relationships. The coded emergent ideas that codified this discovery are: technology, funding is a driver, executive influence, lack of HR tools to support PM, and HR considering how to support

project stakeholders. This discovered theme is relative to theme three that was discovered during the review of scholarly literature because of the identification of executive level management as being a gatekeeper to resources that are necessary to for DON project managers and DON HR practitioners to work together productively.

Summary of the Literature Review

This literature review commenced with an explanation for why the literature review was conducted. A summary and two Tables of the scholarly resources were depicted to display the types of work reviewed. Following the summary was an outline of how the HRAP theory guided the literature review and the formation of themes. A description of the workforce to which this research is applicable is provided before describing the concepts of PM, HRM, and the construct of PRM. Perceptions of scholars' perspectives that will guide this research and the potential perceptions that result from the case study were discerned. The literature review concluded with a review of themes discovered within the literature. They were then expanded upon to elaborate how the factors within each theme effect DON project managers use of HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams so that their projects can be completed efficiently. After this elaboration, the themes were compared to the themes that were discovered during an analysis of the data that was collected during participant interviews with DON project managers and DON HR practitioners.

Summary of Section 1 and Transition

In the first section of this research the background of the problem, problem statement, and purpose statement regarding the use of HRM to facilitate PM in DON acquisition mission-oriented organizations were introduced. The nature of the study was expanded upon so that the reader can understand how and why the research methodology and design were chosen. The

qualitative multisite case study design was selected because the constructivist paradigmatic lens aims to expand empirical knowledge through exploration of the perspectives of those affected by the problem (Chandra & Shang, 2017; Smith & Shaw, 2019). A definition of terms relative to the DoD, DON, HRM and PM; as well as a set of assumptions, limitations, and delimitations, were posited to aid the reader in gaining an understanding of the unique terminology and scope of this research. The significance of the study was emphasized so that the reader can understand how and why this research will reduce the gap in PM and HRM bodies of knowledge; whereby, the value within is codified through the integration of biblical scripture. An exhaustive literature review of scholarly works, commensurate with projects related to the DoD, DoD AWF, DON, DAWIA, and HRM, was integrated into this research by articulating the findings of those authors' intellectual perspectives. Those findings helped to form the conceptual framework that guided the development of this research.

The next section of this research builds upon the dynamics of the research project and how the research project will be conducted. Key elements of this section include the project purpose, role of the researcher, participants, research method and design, population sampling, qualitative data collection, qualitative data analysis, and qualitative reliability and validity. The section will close with a transition to Section 3, the application to professional practice and implication for change.

Section 2: The Project

In this section the purpose statement was revisited in order to emphasize the reasoning for the research to be conducted. The role of the researcher, as well as who the participants are, are addressed to identify the impact of each stakeholder in this research. The research method and design are highlighted to convey how the research was conducted. The research population and sampling are introduced to discuss the research sampling strategy. Data collection methods are discussed to identify the instruments, data collection techniques, and data organization techniques. The data analysis methods and coding process are observed to specify how the data were interpreted. The reliability and validity of the research are examined to underscore the utility of the methods by which the research was conducted.

Purpose Statement

The purpose of this proposed multisite case study is to explore how project managers, within acquisition mission-oriented organizations of the DON, use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects. By extension, this research will help researchers explore how project managers in general use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order complete projects. Due to the dynamic role of PM in the development of Naval assets, PM is regarded as an essential function of the DON (Darling & Whitty, 2016; Hur, 2018; Sandhu & Khan, 2017). Sandhu and Khan (2017) pointed out that the DON has realized the value of the human dimension of PM as far back as the period when the Panama Canal was being constructed. Furthermore, Salovaara and Bathurst (2018) acknowledged that project outcomes fall on the shoulder of project teams and are of particular significance within the DON. Therefore, this research was conducted because there was need to explore the perspectives of

project managers and HR practitioners within acquisition mission-oriented organizations of the DON. The resulting data collected during this research was analyzed in order to interpret and describe the impact of each stakeholders' perspective as was related to their functional relationships. This research helped to ascertain whether or not the aforementioned stakeholders' functional relationships are effective in employing HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects. At this point in the research, the phenomenon was generally defined as being related to the relationship, teamwork, and shared resources between project managers and HR practitioners within acquisition mission-oriented organizations of the DON.

Role of the Researcher

Qualitative research is built around an experiential understanding; therefore, those that collect data for qualitative research can be directly or indirectly involved in the research (Stake, 2010). In this qualitative research, the researcher was the instrument who often played a subjective role to the research by applying personal experiences to posit interpretations (Stake, 2010). Qualitative researchers need to ask questions, listen well, stay adaptive, have a solid understanding of the problems being studied, and always conduct research through an ethical lens (Yin, 2018). During this case study research, data, in the form of real-world experiences of participants was gathered via semi-structured interviews. Semi-structured interviews were guided by open ended questions in order to stimulate conversation between the researcher and the interviewee (Yin, 2018). The open-ended conversation format was designed to channel experiential related responses regarding the concepts of PM, HRM, and the construct of PRM from participants.

Conducting Research through an Ethical Lens

Qualitative case study researchers involve technical aspects of data collection through an ethical lens in order to curb dilemmas, such as dealing with the sharing of private information without consent (Yin, 2018). According to Yin (2018), all case study researchers should strive for maintaining the highest ethical standards while conducting research. Consistent with Creswell (2014), in qualitative research, researchers should reflexively identify any personal background information, such as gender culture, and socioeconomical class, as well as personal bias in order to avoid ethical issues that may affect the research. During this research personal background information such as: gender culture, socioeconomical class, and personal bias were not collected.

Controlling Bias in Research

According to Leedy and Ormrod (2015), researchers who conduct qualitative research should strive to achieve balance, fairness, and completeness in data they collect and the interpretations they make; as well, researchers need to prudently document analysis procedures and be upfront about any personal biases. To listen effectively is to receive information via multiple modalities in order to make ardent observations without bias (Yin, 2018). Creswell (2014) insisted that in a qualitative research design, the researcher is often involved in sustained and intensive experiences with participants of the research. Therefore, researchers need to identify past experiences with the research problem (Creswell, 2014). As well, researchers need to be explicit in explaining how their past experiences may form their interpretations of the collected data (Creswell, 2014). Researchers also need to identify any relationships with the research participants (Creswell, 2014). Although the researcher is a HRM practitioner who manages projects within an acquisition mission-oriented organization of the DON, during this

research data were not gathered from stakeholders of the same DON acquisition mission-oriented organization, nor were interviews conducted with participants who have a working relationship with the researcher. This approach was taken in order to ensure personal and professional bias, as well as any form of reflexivity were deterred during this research (Creswell, 2014; Stake, 2010).

Listening Well, Asking the Right Questions, and Being Adaptive

The ability to posit good questions is a prerequisite to case study research, because the intent is to collect a rich dialogue to interpret (Yin, 2018). During this research the semi-structured interviews administered by the researcher were aligned to the research questions. It is important for a researcher to stay adaptive because it is inevitable that with changes, some could be minor and some could be major; as well, a need may arise for the researcher to pursue an unexpected lead in order to identify a new element of the research (Yin, 2018). The researcher followed up with the interviewees in order to validate responses via validation triangulation and member checking techniques (Creswell & Poth, 2018).

Yin (2018) insisted that all case study researchers should have an understanding of relevant theoretical or policy issues because it is always necessary for a researcher to make analytical judgement calls throughout periods of data collection. Nevertheless, without a solid understanding of the research subject matter, there could be significant clues passed over without conscious regard (Yin, 2018). A researcher must also be cognizant of the need to consistently interpret data throughout the collection process in order to know right away if contradictions exist in the data (Yin, 2018). Therefore, the researcher's background in both PM and HRM professions aided in the understanding of concepts, thoughts, and/or opinions introduced by interview participants' responses. As well, the researcher's background enabled the researcher to be adaptive during the conduct of interviews and analysis of results.

Research Methodology

During scholarly research different types of research methods were considered in order to determine what type of data were needed to be collected and what to do with that data (Creswell & Poth, 2018; Stake, 2010). According to Stake (2010), various research designs will need to be considered by the researcher in order to determine how to employ the most effective research design for a researcher's intended study. The following information aided the researcher in determining the appropriate method and design to codify a plan to conduct the research in order to answer the research questions that steered this research.

Discussion of Flexible Design

With the qualitative research method being the chosen platform to conduct this research, five qualitative research designs were considered. The research design most conducive to this study is the case study research design. The specific type of case study selected for this research was the multi-site case study because during this research SMEs from multiple sites were interviewed in order to interpret their professional perspectives at acquisition mission-oriented organizations that oversee the acquisition and development of various types of deliverables. Each qualitative research design is described below with reasoning for why the research design was considered then selected or not selected to conduct this research.

Narrative Research Design. According to Creswell and Poth (2018), the narrative research design originated through the study of anthropology, education, history, literature, sociolinguistics, and sociology. The narrative research design is a design of inquiry that stems from the aforementioned humanities that are commensurate with the researcher's field (Creswell, 2014). During narrative research, the researcher seeks to know the research participants by listening to the stories of their lives (Creswell, 2014). Given that the intent of this research was to

explore multiple cases that were bound by two processes (i.e., PM and HRM) inside the realm of acquisition mission-oriented organizations within the DON, a narrative research design was not conducive to this research as it was designed (Creswell & Poth, 2018).

Phenomenology Research Design. Creswell and Poth (2018) pointed out that the phenomenology research design has strong philosophical roots. According to Leedy and Ormrod (2015), a phenomenological research study refers to a person's perception of the meaning of a particular event, divergent to the event as it occurs externally to that person. Stake (2010) upheld the idea that through phenomenology, reality is known via sensory experiences. The focus of this research was not to explore a particular phenomenon or phenomena alone; instead, the focus of this research was to conduct in-depth analysis of multiple cases that are bound by HRM and PM processes inside the realm of acquisition mission-oriented organizations within the DON. Therefore, a phenomenological research design was not conducive to this research as it was designed.

Grounded Theory Research Design. According to Creswell (2014), grounded theory research is a sociological design on inquiry where the researcher seeks to build abstract theory of actions, interactions, or processes that are grounded within the views of research participants. Leedy and Ormrod (2015) maintained that in grounded theory research, theory that emerges from the research is consequent from and grounded in data that have been amassed in the particular field of study rather than deriving researched literature. The premise of this research was not to develop theory, but rather to conduct in-depth analysis of multiple cases that were bound by PM and HRM processes inside the realm of acquisition mission-oriented organizations within the DON. Therefore, a grounded theory research design was not conducive to this research as it was designed.

Ethnography Research Design. Creswell (2014) explained that ethnography research stems from anthropology and sociology. During ethnography research, a researcher considers, in depth, the common culture of an entire group (Leedy & Ormrod, 2015). Through ethnography, a researcher can study shared patterns of actions, behaviors, and language of an integral cultural group within a natural setting throughout an extended amount of time. This research was not being conducted in order to ascertain a particular pattern of behavior within the confines of an entire culture sharing group. Since the emphasis of this research was not to ascertain a particular pattern of behaviors within the confines of an entire culture sharing group, but rather to conduct in-depth analysis of multiple cases that are bound by HRM and PM processes inside the realm of acquisition mission-oriented organizations within the DON, an ethnography research design was not conducive to this research as it was designed.

Case Study Research Design. During a case study a certain individual, program, or event is studied for a pre-defined span of time (Leedy & Ormrod, 2015). Creswell (2014) implied that case studies are a design of inquiry that is found throughout many fields, to include business, which is one catalyst for cause to choose to conduct a case study. During a case study a researcher evaluates the dynamics of activities, events, processes, programs, and projects (Creswell, 2014). During case study research data are collected through a variety of data collection procedures over an extended period (Creswell, 2014). Case study data collection procedures can include review of archival records, direct observations, reviewing observation, conducting interviews, participant observation, and review of physical artifacts (Yin, 2018). Given that the intent of this research is to gain an understanding of case study data via exploration of multiple cases that are commensurate with the research problem, and the research was limited to the situationally supportive integration of two functions (i.e., PM and HRM)

inside the realm of acquisition mission-oriented organizations within the DON, the design of case study research was ideal for this research (Creswell, 2014).

Multisite Case Study. According to Leedy and Ormrod (2015), in some instances, researchers prefer to study multiple cases; more often, these cases are either similar or different in certain key aspects, which is essential for making comparisons, building theory, and/or propose generalizations of the case matters. Since the scope of this research was narrowed to a point that does not reflect all processes within acquisition mission-oriented organizations of the DON it was more conducive to study the two particular processes at multiple DON sites, which are PM and HRM during this study (Yin, 2018). In this study a limited scope of personnel from multiple DON acquisition mission-oriented organization were studied.

Within-Site Case Study. While conducting within-site case studies, it can be ascertained that individual cases change over time as the result of certain conditions or interventions that are relative to a given case (Leedy & Ormrod, 2015). The reason for not selecting a within-site case study design was because the scope of this research was limited to two processes (i.e., PM and HRM) inside the realm of acquisition mission-oriented organizations in the DON. However, in order to ensure themes are identified adequately from the individual cases, this research could have required the researcher to interview more than 27 participants (Creswell, 2014; Creswell & Poth, 2018). Therefore, since this research emphasized a need to research multiple sites with a limited scope, in lieu of a broad scope of a single site, a within-site case study research design was not conducive to this research (Creswell & Poth, 2018).

Discussion of Qualitative Research

There were three primary research methods considered for this research, which are qualitative research, quantitative research, and mixed methods research. According to Stake

(2010), a difference between qualitative and quantitative research methods is that qualitative research methods aims for exploration rather than verification of discrete boundaries. Stake (2010) likened qualitative research methods to micro studies that examine a central theme or phenomena, whereas quantitative research methods are likened to macro studies examine and aggregate large groupings of concrete data. Stake (2010) argued that the primary reasoning for conducting mixed methods research is to improve the quality of data that supports the results of the research. The dynamics of each of the aforementioned research methods were evaluated to determine the most suitable research methods to commit to in order to conduct the research that answered the research questions.

Qualitative Research Method. Qualitative research methods are emerging methods consisting of open-ended question to collect interview data, observation data, document data, and audiovisual data that are analyzed via text and image analysis in order to interpret and themes and patterns (Creswell, 2014). According to Windsong (2018), conversations that result from semi-structured interviews during qualitative research have a higher rate of utility for exploration than fixed surveys. Windsong (2018) advocated the utility in qualitative semi-structured interviews, because of the advantage resulting from the assimilation of intersectional perspective in order to establish themes and phenomena. Qualitative researchers also consider the recompense associated with crafting semi-structured open-ended interview questions that unequivocally speak to core theoretical concepts that enable concepts to emerge (Windsong, 2018). Furthermore, Kalu (2019) implied that a researcher should be aware of the changing nature of themes and phenomena that results from qualitative research. It is paramount for qualitative researchers to use an iterative process of revision during prolonged research in order to capitalize on any changes that result from interactions during semi-structured interviews.

Given the purpose of this research, there was a need to explore the perspectives of DON project managers and DON HR practitioners in order to answer the research questions; therefore, a qualitative research method was the appropriate research method for this research.

Quantitative Research Method. Quantitative research methods are pre-determined consisting of instrument-based questions to collect performance data, attitude data, observational data, and census data that are analyzed via statistical analysis in order to interpret statistics (Creswell, 2014). According to Crane et al. (2017), a simple way of understanding many problems in current business and society research is to conduct quantitative research experiments. Quantitative research experiments consist of a control group and a treatment group, before and after treatment observations, as well as a random assignment of subjects into the treatment and control groups (Crane et al., 2017). Crane et al. (2017) insisted that through the conduct of experiments, quantitative research has found a stride of importance within the realm of business and society. However, this research was not reliant on metrics that resulted from a particular treatment observation of those SMEs. Therefore, a quantitative research method was not conducive to this research.

Mixed Methods Research. Mixed methods research methods are both predetermined and emerging methods consisting of both open-ended and closed-ended questions to collect multiple forms of data by drawing on all possibilities that are analyzed via statistical and text analysis in order to develop across databases interpretations (Creswell, 2014). Sykes et al. (2018) claimed that bias can occur during parallel sampling when qualitative and quantitative data are mixed without adjusting for the disparity of probabilities that are grounded in the sampling powers during mixed methods research processes. Sykes et al. (2018) maintained that research samples need to be gathered from the same known population of distribution in order to ensure

sampling strategies remain generalizable and consistent. Nevertheless, failure to align samples according to the synonymous population distributions could generate inconsistent and biased valuations of data in mixed methods research. Sykes et al. (2018) argued that if the researched populous is not controlled appropriately during mixed methods research then a detriment to the integrity of the findings could result from the research. Although the participants from this research were selected from the same population sample (i.e., federal employees who are employed in DON acquisition mission-oriented organizations), metrics resulting from a quantitative analysis were not commensurate with the nature of this case study. Therefore, a mixed methods approach to this research was not appropriate for this research.

Discussion of Method for Triangulation

According to Creswell and Poth (2018), research participant interviews are quite often the principal data collection method during qualitative research. Therefore, interviews were conducted via interview questions that were formed as a result of a review of relative scholarly literature. Three project managers and three supervisory human resources specialists from five acquisition mission-oriented organizations within the DON were the participants of scheduled semi-structured interviews. Creswell and Poth (2018) recommended performing triangulation as a validation strategy to establish credibility of the interview participants. Therefore, the premier method of validation that was facilitated in this research was to triangulate the perspectives of the research interview participants. Triangulation occurred by interviewing three project managers and three supervisory human resources specialists from five acquisition mission-oriented organizations within the DON.

Summary of Research Methodology

The qualitative, quantitative, and mixed methods research methods were considered for this research. Due to the nature of this research being to subjectively explore the perspectives of research participants via open ended question that led to responses that were coded to establish themes, the qualitative research method was chosen (Creswell, 2014; Stake, 2010). The narrative, phenomenology, grounded theory, ethnography, and case study research designs were considered for conducting this research. Given that the intent of this research was to gain an understanding of case study data via exploration of multiple cases that were commensurate with the research problem, and the research was limited to the situationally supportive integration of two functions (i.e., PM and HRM) within the realm of acquisition mission-oriented organizations within the DON, the design of case study research was appropriate for this research; in particular, the design of a multi-site case study was ideal for this research (Creswell, 2014).

Participants

Stake (2010) suggested that researchers should take steps to ensure participants are aware of their role in the research. Creswell (2014) insisted that participants do not need to be deceived. For the sake of the integrity of the research, participants should know their roles, which is imperative while they are actively participating in case study interviews (Creswell, 2014). Nonetheless, Stake (2010) emphasized that steps should be taken by the researcher to avoid collecting any personal information from any participants unless the information is pertinent to the research. Furthermore, researchers need to be cognizant that collecting participant data from a participant that is directly involved with the researcher could introduce bias to the research (Yin, 2018). Therefore, without collecting any personally identifiable information, the researcher

ensured that the participants were aware of their role in the research and no personally identifiable information was collected.

Selecting Participants to Interview

Although it involves many challenges, conducting participant interviews can provide opportunities for researchers to collect case study data (Yin, 2018). According to Creswell (2014), researchers purposefully select research participants in order to aid in understanding the dynamics of a problem. According to Stake (2010), semi-structured interviews are methodically adapted in order to open conversation about complex processes in order to enable interviewees to openly respond through recollection rather than through calculated response. Creswell and Poth (2018) urged that limiting interview participants during case study research is an optimal approach for less experienced researchers. Leedy and Ormrod (2015) also suggested that qualitative researchers are often inclined to choose fewer participants who might shed light on a phenomenon under investigation. Therefore, the participants of the semi-structured interviews were three project managers and three supervisory human resources specialists from five acquisition mission-oriented organizations within the DON.

Participant Awareness

Creswell and Poth (2018) asserted that a challenge to being aware of during participant interviews is the anticipation of unexpected behaviors from the participating interviewee(s). Qualitative researchers that work with participants should work to establish rapport and trust with their participants in order to interact with them, more or less, on a personal level (Leedy & Ormrod, 2015). Creswell and Poth (2018) warned that qualitative researchers risk losing valuable data if an interview gets out of control; therefore, the interviewer should establish the equality amongst the interviewer and interviewee. However, Leedy and Ormrod (2015) warned that

researchers need to be aware of the Hawthorne Effect, which is where participants will change behaviors simply because they are aware that they are a part of a research study. Leedy and Ormrod (2015) also urged researchers to remain aware that some participants may believe that ill intent will result from the subject research, which can spur responses that may require additional validation. In order to mitigate this concern, the interviewees were provided a copy of the interview transcript so that they can check to ensure their responses were collected and transcribed correctly.

Prior to conducting the semi-structured interviews, the researcher provided, via letter attached to an email, an explanation for the purpose of the research to the interview participants so that they were made aware of the purpose of the research being conducted and to ensure they were cognizant of their value and contribution to the research. In order to ensure that the interview participant was fully aware of the reason why they were selected to participate in an interview, the letter also contained a consent form that provided the interview participant an opportunity to consent to the research. The consent form provided a summary of the background information that was relative to the purpose of the research and an explanation of confidentiality so that the interviewees knew their participation in this research was voluntary and they could confirm their personally identifiable information was not collected or shared within this case study. The interview procedures were provided to the interview participants in the consent form. Creswell (2014) indicated that approximately eight interview questions tend to keep an interview contained to about an hour; therefore, the interview participants were informed that the research would consist of six open-ended question groups with an intent to keep the interview contained within 60 minutes. Also, for the interview participants' situational awareness, an explanation of the risks and benefits was provided. The intent of the research was not to compensate interview

participants for their participation; therefore, that decision was advised so that interview participants had the opportunity to opt out of the research if compensation was an expectation. Information regarding how to opt out of the research was provided in case the interview participant decided that the research was not advantageous for them to participate in the research. Lastly, the researcher's contact information was provided to the interview participants in case any questions about the research arose. After each interview, and all responses were transcribed, a copy of the transcript was provided to the interview participant so that the results could be reviewed, changes could be made if necessary, and approval for use in the research could be rendered by the interview participants.

Population and Sampling

During case study research Creswell and Poth (2018) recommended researchers should consider the type of case study, and the relative intent of the case study, when determining the optimal population and sample to research. Creswell and Poth (2018) further recommended developing procedures for conducting extensive data collection that will result from the target sample. The information below describes how and why the target sample from a population were chosen to be given an opportunity to consider participating in this research.

Discussion of Population

Sykes et al. (2018) emphasized those researchers who use a qualitative line of inquiry to draw from a population should proceed from constructivist, interpretivist, or hermeneutic paradigms, wherein the existence of a known truth or objective is questioned and viewed as dependent on subjective interpretations. The population of this case study was situated as professionals who support the AWF within the DON. According to the *DON AWF Fiscal Year (FY) 2016 – 2022 Strategic Plan* (2016), the DON AWF is made up of more than 57,000

civilians and military AWF members in 14 acquisition career fields and who are employed by over 15 major commands that are located throughout the United States. The specific population from that group of DON professionals, whose perspectives are explored in this case study, consists of two specific types of professionals who support the DON AWF. Those professionals are project managers and human resources practitioners. These professionals are employed in support of acquisition mission-oriented organizations of the DON at varying levels of authority. Given the size of the AWF, there are thousands of project managers and human resources practitioners who support DON acquisition mission-oriented organizations.

Discussion of Sampling

Frequently, qualitative researchers who aim for theoretical saturation do not rely on the types of probability sampling that are commonly relied upon by quantitative researchers (van Rijnsoever, 2017). Instead, qualitative researchers tend to rely on purposeful sampling (van Rijnsoever, 2017). Palinkas et al. (2015) pointed out that purposeful sampling is a widely used sampling technique in qualitative research because of the ability to identify and target information-rich cases that are related to a researcher's particular phenomenon of interest. Creswell and Poth (2018) advised that it is important to find the right people to study then gain access to those people in order to establish rapport with them. According to Creswell and Poth (2018), it is important to gain rapport with research participants because they will provide meaningful information to support the research. This process involved identifying and selecting individuals that are expressly knowledgeable about and experienced with the specific phenomenon of interest (Creswell, 2014; Palinkas et al., 2015).

The Target Sample. To be eligible to participate in this research, the sample must have been comprised of DON project managers and DON supervisory human resources specialists. In

this case study the target sample consisted of DON project managers and DON supervisory human resources specialists who work in the area surrounding Washington, DC. The sample size consisted of three DON project managers and three DON supervisory human resources specialists from five acquisition mission-oriented organizations of the DON. The specific location was relevant to this multi-site case study because Washington, DC is the central location for most decision-making headquarters elements of acquisition mission-oriented organization within the DON. For this case study, experience was defined as having already been employed in project work packages on a project from start to finish. The target experience level for project managers and supervisory level HR practitioners is having been in the leadership position for at least 12 months, which is the minimum length of time for a federal position probationary period, as prescribed by 5 Code of Federal Regulation (*Probation on Initial Appointment to a Competitive Position*, 2000; *Probation on Initial Appointment to a Supervisory or Managerial Position*, 1979).

Contingency for Additional Interviews. As the research progressed, in case a need to interview additional project managers and/or supervisory human resources specialists of acquisition mission-oriented organizations of the DON arose, there was a contingency to interview no more than 27 interviews. The identification of 27 interview participants was implemented in order to control the scope of this research (Creswell & Poth, 2018). However, in order to ensure themes were identified adequately from the individual cases, the idea of needing to require more than 27 participants was considered (Creswell, 2014; Creswell & Poth, 2018).

Summary of Population and Sampling

Specific types of population and sampling that were conducive to this research were discussed in this section. The population of this research are DON project managers and DON

supervisory human resources specialists. These professionals were employed in support of acquisition mission-oriented organizations of the DON at varying levels of authority. Purposeful sampling was employed as the sampling technique to target knowledgeable and experienced professionals for this case study research. The target sample size involved of a total of six interviews that consisted of three DON project managers and three DON supervisory level HR practitioners from five DON acquisition mission-oriented organization. In addition, a contingency for additional purposeful sampling was put in place in case a need to conduct additional interviews stemmed from the analysis of the results from the original six interview participants.

Data Collection and Organization

Creswell and Poth (2018) found it to be useful while conducting field research to organize data collection activities via the data collection circle, which helped the researcher visualize the interrelated activities that were directed at gathering valuable information that helped to answer research questions. Creswell and Poth's (2018) circle of data collection activities identified the need to locate the required site or individual, gain access to develop rapport, sample purposefully, collect the data, record the information, minimize issues in the field, store data securely, and each of the aforementioned activities are linked together by the need to be attentive to ethical considerations. Yin (2018) advised that when collecting data for case study research, four principles of data collection that researchers should consider are to use multiple sources of evidence, create a case study database, maintain an evidence chain of custody to ensure sensitive data are covered, and exercise care when using social media. Through use of Creswell and Poth's (2018) circle of data collection activities, and Yin's (2018) four principles of case study data collection, the researcher was able to identify the instruments for data

collection, select the appropriate data collection techniques and how to organize the collected data, anticipating ethical matters, sampling strategy, data recording and storage, as well as to manage conflicts in the field of study.

Data Collection Plan

The sources of data that were collected by the researcher for this multisite case study are interview data, participant observation, and documentation review (Creswell & Poth, 2018; Stake, 2010). Interviews were conducted in a nine-step process. The first step was to submit to and receive approvals from the Liberty University Institutional Review Board, the DON Office of Naval Research, and the Navy Survey Program Manager. The second step was to identify interview candidates based off of the predefined scope of required participation (i.e., project managers and supervisory human resources specialists). The third step was to contact the potential participants via email (Appendix A). The fourth step was to collect the participant informed consent forms (Appendix B) from the email responses that are sent by participants who are interested in the research. The fifth step was to review the screening questions, specified in Appendix A that are replied to in the email responses from interested participants. The sixth step was to contact the candidate research participants via email to schedule interviews. The seventh step was to conduct the interviews. The eighth step was to transcribe the interview data. The ninth step was to send the respective interview transcriptions to the research participants in order to enable the research participant to make changes if needed; as well, to gain research participants approval to use the content of the interview in this research.

According to Creswell and Poth (2018), participant observation was ongoing as work was being conducted simultaneously to this research, which supported the researcher as an instrument. However, the researcher was conscious and cautious of the potential for bias in

participant observation (Creswell & Poth, 2018; Yin, 2018). Document review was also an ongoing process that was used as evidence that was referred to in order to validate findings in the research (Creswell, 2014).

Instruments

In qualitative research the researcher is the primary data collection instrument (Creswell, 2014; Creswell & Poth, 2018; Leedy & Ormrod, 2015; Stake, 2010; Yin, 2018). The primary data collection instruments that were used by the researcher were interview data and participant observation data. As a supplement to the primary methods of data collection for this case study, the researcher reviewed relative documentation in order to compare themes to standard operating procedures and organizational analysis.

Interview Data. According to Yin (2018), the strengths of interviews are that they can either be targeted in order to focus directly on specific case study topics or they can be insightful, which helps to ascertain personal views and explanations. According to Yin (2018), interviews may consist of poorly articulated questions that can induce bias, result in response bias, could be inaccurate because of poor recollection, or could result in reflexive responses. The interviews that were conducted in this research were targeted with caution because of the weaknesses referenced by Yin (2018). Out of caution to avoid interview weaknesses, the researcher conducted interviews at locations that were not relative to the researcher's employer.

An interview guide (Appendix C) was been created to navigate the interviews during this research. The guide was developed as recommended by Creswell (2014). Creswell (2014) also suggested using an interview protocol to manage an interview. According to Creswell (2014), an interview protocol should consist of a heading, an opening with guiding instructions, the

interview questions that are probing, and a closing thank you to the research participant that ensures confidentiality while advising the next steps in the process.

Participant Observation Data. Creswell and Poth (2018) specified four types of observation, which are complete observer, complete participant, observer as a participant, and participant as an observer. Consistent with Yin (2018), the strengths of participant observation are immediacy, which entails real-time coverage, and contextual, which can cover the context of the case. The weaknesses of participant observation that are explained by Yin (2018), are that it is time consuming, selectivity can be broad without a team of observers, actions can be reflexive if the participants know that they are being observed, there is a potential for high costs if there is an expense relative to the observation, and there is a potential for bias due to the possibility that participant as an observer can manipulate observed events.

During this research, the researcher is both a project manager and a HR practitioner within an acquisition mission-oriented organization of the DON. Therefore, the researcher was by default a participant as an observer because the researcher regularly participates in observed activities within the DON. However, since the researcher was not an employee of any of the studied DON acquisition mission-oriented organizations, the possibilities for personal bias and reflexivity were reduced due to observations being made through a lens that revealed work being conducted at external DON acquisition mission-oriented organizations.

Data from Documentation Review. As said by Yin (2018), the strengths of documentation review are that it is repeatedly reviewed; unobtrusive by not being a direct result of the case study; contains specific data that is necessary for the research; and can broadly cover spans of time, events, and settings. The weaknesses of documentation review that are clarified by Yin (2018) are the documents can be difficult to find, considered bias if a collection of

documents is incomplete, could reflect bias of the author, and access to necessary documentation may be restricted. During this research, the documents that were reviewed are standard operating procedures relative to general DON PM practices, PRM practices, and HRM practices; therefore, the documents that are referenced in this research are unclassified, transparent, and readily accessible for public knowledge.

Data Organization Plan

To organize the collected data, Yin's (2018) second principle of case study data collection is to create a case study database. According to Creswell (2014), researchers often develop a data collection log to manage and keep record of interview transcripts and other documents that will be collected for the case study. Yin (2018) indicated that collected data will consist of field notes, documents, tabular material, and new narrative compilations. With semi-structured interviews being the primary source of data collected in this research there were field notes to organize. The documents referenced in this research were also organized for searchability. According to Yin (2018) tabular materials are typically commensurate with quantitative data collect; therefore, during this research no tabular materials were collected, organized, and maintained. Yin (2018) mentioned new narratives can be compiled to ascertain themes from the answers to interview questions, which can be compared with other narratives to develop new themes. Creswell (2014) also pointed out the helpfulness that stems from categorizing the aforementioned data into primary data and secondary data. Primary data are data that is collected directly from people or direct observation of a situation under study; whereas, secondary data are data that consist of secondhand accounts by people or a situation described or written by others (Creswell, 2014).

Summary of Data Collection and Organization

The examination of data collection consisted of a discussion of general data collection, data collection instruments, data collection techniques, and data organization techniques. During this research, the researcher was the instrument. The data collected was interview data, participant observation data, and data that stems from document review. The organized data were field notes, documents, and new narrative compilations.

Data Analysis

According to Yin (2018) analyzing case study data are one of the least developed methods of data analysis; however, with adequate presentation of evidence, and rigorous empirical thinking, it can be done. Creswell and Poth (2018) insisted that data analysis, along with organizing data and report writing, are processes that work best if managed simultaneously. Creswell (2014) found that during qualitative research interviews, the interviewer may be taking notes of the current interview, while simultaneously analyzing the transcriptions of previous interviews in order to develop a new narrative that can be useful in organizing the final report. Stake (2010) implied that during the analysis of data, qualitative researchers use their own experiences to sort and analyze the data in order to write the final report; however, researchers must be cognizant of how for personal bias and assertions could affect the research. According to Leedy and Ormrod (2015), researchers observe a few specific events that result in the imposition of specific meanings, which are often by coding in a particular way in order to draw conclusions about other findings.

Emergent Ideas

According to Leedy and Ormrod (2015), categories emerge from data collected during interviews and observation. These emergent ideas will lead to information, patterns, and/or

theories that help explain the phenomenon under study (Leedy & Ormrod, 2015). In order to consolidate and collaborate any emergent ideas, compartmentalized interview questions were divided into multiple files that were layered from the thematic base of the series of questions to each individual question. Each file consisted of the consolidated responses to each relative interview question from each research interview participant.

Coding Themes

The data that results from this research was coded in the following steps as prescribed by Creswell (2014), Leedy and Ormrod (2015), and Yin (2018). The data were converted into one or more forms that was easily organized and analyzed (Leedy & Ormrod, 2015). The data were organized in a preliminary, trivial way that permitted the researcher to find the data easily as the researcher progressed in the analysis (Creswell, 2014; Leedy & Ormrod, 2015). All organized data were thoroughly read (Creswell, 2014). Preliminary groups were then identified in order to simplify the process of coding the data (Leedy & Ormrod, 2015). The data then needed to be divided into significant units that were able to be individually coded (Leedy & Ormrod, 2015). The initial coding arrangement to a subgroup of the data were employed (Creswell, 2014; Leedy & Ormrod, 2015). At this point, the researcher created a final list of codes and sub-codes, then defined each code and sub-code as specifically and as feasibly possible (Leedy & Ormrod, 2015). The researcher needed to use the coding process to generate descriptions via different arrays in order to reflect different themes and subthemes that resulted during the analysis (Creswell, 2014; Yin, 2018). The researcher did not consider using independent evaluators to code the data (Leedy & Ormrod, 2015). The researcher then identified remarkable patterns and relationships amongst the codes (Leedy & Ormrod, 2015). Fortunately, this process was

automated and was partially completed with the assistance of the EndNote X9 and QSR NVivo computer applications.

Interpretations

As the analysis occurred, the researcher compared the resulting themes to the research problems to interpret the findings from the data (Creswell, 2014; Leedy & Ormrod, 2015). Leedy and Ormrod (2015) cautioned researchers to be especially careful to not draw conclusions about causation or influence when the design of a study does not warrant such conclusions. Moreover, the researcher must be alert for outliers, exceptions, and contradictions that could be found in the data set (Leedy & Ormrod, 2015). In order to not postulate themes that are outside of the scope of this research, the researcher focused on removing the emergent ideas that were not commensurate with the nature of this research. Therefore, only data from themes that are within the scope of this research were interpreted.

Data Representation

According to Leedy and Ormrod (2015), people can ruminate on data more clearly and efficiently on a topic when their thoughts are represented with specific words and phrases. Therefore, the researcher advanced the resulting themes representation via narrative formats (Creswell, 2014). As well, the research questions, interview questions, and resulting themes were represented via tables that will enable the reader to interpret the data with ease.

Analysis for Triangulation

Creswell and Poth (2018) recommended performing triangulation as a validation strategy to establish credibility of the interview participants. Therefore, the premier method of validation that was facilitated during this research was to triangulate the perspectives of the research interview participants. Triangulation occurred by interviewing three DON project managers and

three DON supervisory human resources specialist from five different DON acquisition mission-oriented organizations.

Summary of Data Analysis

The process of analyzing data can be summarized by reflecting upon Creswell and Poth's (2018) *Data Analysis Spiral*. Within this perspective, collected data were managed and organized. After being organized, the resulting data were read in order to discover emerging ideas. Once those ideas were ascertained, they were coded and categorized into themes. Themes were then assessed to form interpretations of the findings for a final report that provided a representation of the data (Creswell, 2014; Leedy & Ormrod, 2015).

Reliability and Validity

Stake (2010) insisted that evidence-based research should empower people to realize a deeper conviction of how everything works and what to do with that understanding. This level of understanding can only be achieved if the strategies used to collect and analyze data are reliable and reveal valid results (Stake, 2010; Yin, 2018). As researchers collect and analyze data, they must discern the reliability and validity of the data that they are trusting to support their research (Creswell, 2014; Creswell & Poth, 2018; Leedy & Ormrod, 2015; Stake, 2010; Yin, 2018). Creswell (2014), as well as Leedy and Ormrod (2015), posited five specific reliability validation strategies that are conducive to qualitative research; those being, reflexivity, triangulation, clearly distinguishing between data and memos, seeking of exceptions and contradictory evidence, and spending considerable time on site. Each of the aforementioned strategies constitute a process used to validate the data collected during this case study and assure the reliability of the results that are postulated during the analysis of the data (Creswell, 2014; Leedy & Ormrod, 2015).

Reliability

Yin (2018) explained the goal of reliability in the context of research is to minimize biases and errors that can occur during research. According to Yin (2018), when conducting research, it is particularly important for a researcher to ensure that any other researcher can, at another period in time, conduct the same research, via the same strategic procedures, and derive the same results. Yin (2018) insisted to produce reliable data collection and analysis procedures, the researcher should rely on the adopted case study protocol, and a case study database that is implemented for the research.

Overview and Outline of the Case Study. To ensure future researchers can replicate this research, this researcher designed a reliable case study protocol. In order for this research strategy to meet the desired level of expectation of reliability, the adopted case study protocol and data base was adhered to with integrity. Yin (2018) also suggested for a researcher to engage in their research analysis with the perception that someone is always viewing over the shoulder of the researcher. Taking the aforementioned approach was necessary to ensure the research was as explicit as possible (Yin, 2018).

Data Coding and Analysis Procedures. The data needed to be organized in a way that enabled the researcher to locate the data easily throughout an analysis (Creswell, 2014; Leedy & Ormrod, 2015). This was achieved through easy to follow coding patterns that other researchers can relate to and rely on during future research (Creswell, 2014; Leedy & Ormrod, 2015). As well, this research comprised of a case study database that consisted of appropriately organized research documentation (Yin, 2018).

Standardized Question Formats. Creswell (2014) insisted that standardized research interview questions do not induce bias via reflexivity. The expectation of reliability for the

standardized questions of this research was defined to meet the expectations of the research participants, and their relative bodies of knowledge, that will be directly impacted by this research (Creswell, 2014; Leedy & Ormrod, 2015). The participants of this research were the three DON project managers and three DON supervisory human resources specialists of the five acquisition mission-oriented organizations of the DON.

Validity

Yin (2018) suggested a qualitative researcher's consideration for the variety of perspectives relative to the research is necessary to validate the researcher's case study. When seeking to validate data collected during qualitative research, Creswell and Poth (2018) suggested researchers pursue corroboration of the evidence by viewing the results of analysis through the researcher's lens, the participant's lens, and the reviewer's lens. The dynamics of each of the following viewpoints aided the researcher in validating the data, via multiple perspectives to look for biases, consistencies, and inconsistencies (Leedy & Ormrod, 2015).

Researcher's Lens. Creswell and Poth (2018) indicated that to validate the data via researcher's lens, the researcher must corroborate evidence through triangulation of multiple data sources, discover any negative case analysis or disconfirming evidence, and clarify any researcher bias or engagement of reflexivity. According to Leedy and Ormrod (2015), during qualitative research a perceptive researcher may recognize underlying patterns within social interactions or cultural artifacts that a standardized that a quantitative measurement instrument is likely to never reveal. During this research, the researcher utilized the above referenced strategies recommended by Leedy and Ormrod (2015) to validate the reliability of the data collected and the analysis of the collected data.

Participant's Lens. Creswell and Poth (2018) suggested the importance of realizing the validity of data through a participant's viewpoint is paramount to the research. To recognize the participant's angle, the researcher must seek participant feedback via member checking, engage in prolonged and persistent field observations, and collaborate with the participants (Creswell & Poth, 2018). Throughout the data collection and analysis, the researcher engaged with the participants to seek their feedback and collaborate with them to ensure accurate data were reflected in the final results (Creswell & Poth, 2018).

Reviewer's Lens. Creswell (2014) implied the perception of a reviewer's validation of the data analysis is significant. To ascertain a reviewer's take on the validity of the data analysis, the researcher should enable external auditing, produce a detailed description of the data analysis, and hold a peer review of the data collection and analysis processes (Creswell, 2014). Prior to completing the research, the data collection and analysis was vetted through appropriate channels to ensure the data collected was accurate and would not reflect any potentially classified content (Creswell, 2014). Those conducting this review are generally perceived as the audience who will gain from this research (Creswell, 2014).

Bracketing

According to Creswell and Poth (2018), bracketing personal experiences can be difficult for any researcher to implement because the interpretation of data are grounded in part by the researcher's own observations and experiences. However, in order to understand phenomena exactly as participants experience it, the researcher's biases, prejudices, and any preconceived ideas about the data being analyzed must be bracketed, or separated from the data interpretation process (Leedy & Ormrod, 2015). Therefore, in order to ensure the researcher's biases, prejudices, and any preconceived ideas about the data being analyzed did not impact the

interpretation of the findings, all of the researcher's biases, prejudices, and any preconceived ideas about the data being analyzed were identified in order to validate that the findings were not skewed due to reflection of the researcher personal perceptions.

Summary of Reliability and Validity

The reliability and validity of this research are summarized by indicating the strategies and tactics used in this research to ensure the reliability and validity of the research. To ensure the reliability of the research, the research adhered to the adopted case study protocol and case study database (Yin, 2018). The researcher also audited the procedures to ensure the research was repeatable if the processes are explicitly adhered to. To ensure validity, the researcher engaged in validation strategies through the researcher's own perspective, as well as the perspectives of the research participants and the reviewers of the research (Creswell, 2014; Creswell & Poth, 2018; Leedy & Ormrod, 2015; Yin, 2018). In order to confirm validity of the research, strategies such as reflexivity, triangulation, clearly distinguishing between data and memos, seeking of exceptions and contradictory evidence, and spending considerable time on site was adhered to by the researcher (Creswell, 2014; Creswell & Poth, 2018; Leedy & Ormrod, 2015; Yin, 2018).

Summary of Section 2 and Transition

In the second section of this research the purpose of the research, regarding the use of HRM to facilitate PM in DON acquisition mission-oriented organizations was addressed. The population and sampling were expanded upon so the reader can understand how and why the population sample were chosen. In particular, three DON project managers and three DON supervisory human resources specialist, from five different acquisition mission-oriented organizations of the DON, populated the sample; however, to ensure validity of the research

there was a contingency installed in the research in case there was a need for more research participants. If that need were to arise, then the expectation was for the population sample to consist of no more than 27 research participants. In this section the data collection and analysis procedures are discussed. During this research, the researcher collected data via participant interviews, participant observation, and data collection from relative documentation. The data were analyzed via automated coding process via the EndNote X9 and NVivo programs. The section closes with a review of the reliability and validation strategies that are used in this research. The reliability and validity of this research are summarized by indicating the strategies and tactics used in this research to ensure the reliability and validity of the research.

The next section of this research builds upon the foundation of this section by consisting of the research results and findings of the research conducted during this case study. Key elements of the application to professional practice and implications for change section include: an overview of the study; anticipated themes and perceptions; presentation of the findings, to include the theme, patterns, and relationships; the relationship of themes and patterns to research questions, and a summary of the findings (Creswell & Poth, 2018). This section concludes with the applications to professional practice, recommendations for action, recommendations for further study, and the researcher's reflections. The case study will conclude with a final summary and study conclusions.

Section 3: Application to Professional Practice and Implications for Change

In this section the researcher will provide an overview of the study to set the pace for the presentation of the findings. During the presentation of the findings, the researcher will explain the themes discovered during the collection of data via semi-structured interviews, data observation, and personal observation. The researcher will summarize the discovered themes by interpreting the discovered themes as they compare to the composition of the codes that were found to be most common amongst the interview participants when identified within the NVivo application. A visual representation of the data will be provided so that the reader has an opportunity to see the correlation amongst the most frequent codes the corresponding discovered themes. The relationships with the findings as they relate to the research questions, the conceptual framework, the scholarly literature reviewed, and the research problem.

After the presentation of the findings, an overview of the study will be provided to address the application to professional practice. The application to professional practice will cover detailed discussions pertaining to methods for improving general business practices, as well as potential application strategies. Recommendations for further study will be provided via specific examples of further areas that should be studied based upon the findings from this study. The researcher shares reflections of the study to express the researcher's personal and professional growth, by providing insight into how conducting this research project has provided for personal and professional growth. The researcher also reflects on the Biblical perspective attained from this research by providing a detailed discussion of how the business functions explored in this study relate to and integrate with a Christian worldview. This section will conclude with a summary of Section 3. Lastly, this dissertation will conclude with a summary and study conclusions.

Overview of the Study

The purpose of this multisite case study has been to explore how project managers, within acquisition mission-oriented organizations of the DON, use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects. During this research three DON project managers and three DON supervisory HR specialists from five DON acquisition mission-oriented organizations participated in semi-structured interviews. This qualitative multi-site case study explored how DON project managers allocate and employ HRM tools and techniques, via support from HR practitioners, in order to plan, estimate, acquire, develop, manage, and control project teams in acquisition mission-oriented organizations of the DON. The specific problem addressed was the ineffective use of HRM tools and techniques by project managers within acquisition mission-oriented organizations of the DON to plan, estimate, acquire, develop, manage, and control project teams resulting in the potential for the integrity of the processes of a DON commissioned project to be adversely impacted. The participant responses were each triangulated to ensure validity and reliability (Creswell & Poth, 2018).

Presentation of the Findings

This research consisted of interviews with three DON project managers and three DON supervisory human resources specialist from five DON acquisition mission-oriented organizations. Participants two, four, and five of the semi-structured interviews were DON project managers. Participants one, three, and six of the semi-structured interviews were DON supervisory human resources specialists. Each of these interviews lasted approximately one hour. Each interview consisted of questions that fell within five subsections that were developed from themes that were discerned during the review of scholarly literature and DON unclassified

standard operating procedures (i.e., documents that are available for reference via search through public websites). Each subsection within the interview guide consisted of three to six questions.

Themes Discovered

During an initial analysis conducted by simultaneously reading and listening to the interview transcripts 46 preliminary findings of interest were discovered. Each of these findings correlated to one of the sublevel interview questions. These findings are a consolidation of likened perspectives between the different professions (i.e., HR practitioner & project manager). Of these findings 23 are relative to the project managers' perspectives and 23 are relative to HR practitioner perspectives. These findings were later compared with codes that were refined within the NVivo application; the result is a group of emergent ideas for translation into discovered themes.

Interview Question 1. Interview participants were asked to describe the key strategies project managers use to allocate and employ the HRM tools and techniques that enable project teams to complete project work within their organization. This subsection consisted of six questions. The subquestions were designed to gain an understanding of project manager and HR practitioner perspectives regarding how project managers employed HRM tools and techniques via support from HR practitioners to plan, estimate, acquire, develop, manage, and control human capital resources in order to sustain project teams.

Interview Question 1.a. When asked how are human resources (HR) practitioners employed by project managers to allocate the HRM tools and techniques that enable project resources management (PRM) functions, Participants two, four and five provided responses that implied project managers are familiar with HR operational roles. However, Participants two, four and five suggested HRM processes are not sensitive to project time management check points

and milestones; as well, HRM processes and are exceedingly cumbersome to use effectively when allocating human capital to sustain project teams. Comparatively, participants one, three, and six implied that HR is not familiar with PM processes, policies, and procedures as they relate to the allocation of human capital in support of project teams. As well, participants one, three, and six insisted when allocating human capital for organizational operations, the *Prohibited Personnel Practices* (PPP) are the ethical framework that HR practitioners must follow to ensure the allocation of human capital is managed fairly amongst all stakeholders.

Interview Question 1.b. When asked how are HR practitioners employed by project managers to estimate the HRM tools and techniques that are needed to support PRM functions, Participants two, four, and five suggested HR is seen as a constraint because HR practitioners may intervene with an unexpected requirement that can slow or halt a project altogether. However, Participants two, four, and five agreed project managers are often not familiar with the utility of human capital management strategies that enable them to effectively estimate the HRM tools and techniques that are needed to support PRM functions. Moreover, Participants one, three, and six insisted HR practitioners are not involved in the estimation process enough; as well, more project manager involvement with HR practitioners in the design of estimation process is necessary in order to design processes that effectively enable project managers to estimate the HRM tools and techniques that are needed to support PRM functions.

Interview Question 1.c. When asked how are HR practitioners employed by project managers to acquire the human capital that is necessary to sustain project teams, Participants two, four, and five insisted project managers need project team members to be acquired by the fastest means possible. Participants two and five suggested that the implementation of advanced technology is paramount in maintaining the pace with industry competitor recruitment efforts.

However, Participants one, three, and six advocated that the HRM tools and techniques are available at a cost, but that will impact the budget; therefore, funding for HR related efforts needs to be made a priority by executive level management who authorize funding. Moreover, Participants one and six insisted project manager support via participation in efforts to acquire human capital (e.g., virtual and live recruitment events) for project teams is essential.

Interview Question 1.d. When asked how are project teams developed via HRM tools and techniques, participants two and five insisted no project team specific training is made available by HR practitioners; furthermore, training and development for project teams is often outsourced. Participant four also pointed out current HR specific development emphasizes an operational setting rather than a projectized setting. Participants one, three, and six oblige by pointing out that HR offices typically do not know how to facilitate PM team training specifically; as well, there needs to be better communication, integration, and collaboration (e.g., implementation of modernized communication methods and technology) with PM and team members in order to design and facilitate development for project teams.

Interview Question 1.e. When asked how are project teams managed via HRM tools and techniques, Participants two, four, and five explained project managers cannot use HR to manage project teams because HR practitioners are unfamiliar with PM skillsets, processes, policies, and procedures. Participants two and four offered performance evaluations used to manage human capital are individual based and not project team performance driven. Participants one, three, and six also implied that evaluations used to manage performance are individual performance driven and there is presently no effective tool available to evaluate project team performance.

Interview Question 1.f. When asked how are project teams controlled via HRM tools and techniques, Participants two, four, and five rely on software technology to monitor and control

PM teams. Participant five explained being unfamiliar with how to integrate HRM tools and techniques with PM in order to control PM teams. Participants one, three, and six offered opposing perspectives by suggesting there are incentives to control project team members. As well, Participant three pointed out that project managers rely on milestone check points to ensure project teams are in a controlled state, which HR can help to facilitate those milestones with adequate integration of project managers and HR practitioners.

Interview Question 2. Interview participants were asked to describe the observed level of competence displayed by each of the following stakeholders to allocate and employ the HRM tools and techniques that facilitate PRM processes at their organization. This subsection consisted of four questions. The subquestions were designed to gain an understanding of project manager and HR practitioner perspectives regarding the observed level of competence of project team members, project managers, HR practitioners, and organizational executive level management.

Interview Question 2.a. When asked to describe the observed level of competence displayed by project team members to allocate and employ the HRM tools and techniques that facilitate PRM processes at their organization, participants two, four, and five insisted there is not a lot of interaction. Participants two and five also insisted that project team members typically only go to HR to complain for various reasons. Participants one, three, and six explained that some project team members do care about the project and some of them do not, and this is why upfront project team member screening and vetting before hiring is paramount.

Interview Question 2.b. When asked to describe the observed level of competence displayed by project managers to allocate and employ the HRM tools and techniques that facilitate PRM processes at their organization, Participants two, four, and five exclaimed project

managers are very competent in PM work, but not in understanding HRM tools and techniques. In general, Participants two, four, and five agreed that generally project managers do not use HRM tools and techniques effectively. On the other hand, Participants one, three, and six offered their perspectives that proactive behavior from a project manager is viewed as competent, but reactive behavior is viewed as not competent. Furthermore, participants one, three, and six insisted that HR integration is a necessary factor of PM competence.

Interview Question 2.c. When asked to describe the observed level of competence displayed by HR practitioners to allocate and employ the HRM tools and techniques that facilitate PRM processes at their organization, Participants two, four, and five believed that HR practitioners are very competent in HRM tools and techniques but not PM processes, policies, and procedures. Participants two, four, and five agreed that HR practitioners focus on the organization as a whole, but not on project teams in general. Participants one, three, and six agreed that HR practitioners are very competent in allocating and employing HRM tools and techniques, but they are often not competent in PM work. Moreover, Participants one, three, and six established that HRM tools and techniques are good for the organization, but as they are presently designed, HRM tools and techniques are not conducive for project managers to plan, estimate, acquire, develop, manage, and control human capital resources in order to sustain project teams.

Interview Question 2.d. When asked to describe the observed level of competence displayed by organizational executive level management to allocate and employ the HRM tools and techniques that facilitate PRM processes at their organization, Participants two, four, and five advocated their executive level management understands all lines of business and utilizes HRM tools and techniques very effectively. From a similar perspective, Participants one, three,

and six agreed that their organizational executives are all around very competent, but sometimes they can be too micromanaging; as well, they can sometimes lose focus of executive work when they get in the weeds of line level work.

Interview Question 3. Interview participants were asked to describe the level of effectiveness regarding how and why HRM tools and techniques are allocated and employed by project managers via HR practitioners during PRM processes to support project teams within their organization. This subsection consisted of five questions. The subquestions were designed to gain an understanding of project manager and HR practitioner perspectives regarding the level of effectiveness pertaining to how and why HRM tools and techniques are allocated and employed by project managers via HR practitioners during PRM processes to support project teams within their organization.

Interview Question 3.a. When asked how effective are project managers at allocating and employing HRM tools and techniques during PRM processes to support project teams, Participants two, four, and five agreed project managers are not as effective as they could be with respect to allocating and employing HRM tools and techniques. Participants two and four suggested project managers are mostly reactive in their use of HRM Tools and Techniques because they are often seen as only being effective when there is a problem. Participants one, three, and six pointed out that project managers are getting better at effectively using HRM Tools and Techniques, especially as technology progresses. However, Participant six insisted their effectiveness all depends on project managers' willingness to use HRM Tools and Techniques.

Interview Question 3.b. When asked how do project managers affect the allocation and employment of HRM tools and techniques during PRM processes, Participants two, four, and five insisted communication is a major contributing factor. Participant one posited if project

managers do not communicate a lack of understanding of HRM Tools and Techniques then the result is a negative effect. Participants one, three, and six insisted project managers proactive use of HRM tools and techniques yields a positive effect, while reactive project managers who try to use HRM tools and techniques yields a negative effect. Participant three offered that freedom to manage projects with less bureaucracy is an enabler, which can encourage project managers to use HRM tools and techniques effectively.

Interview Question 3.c. When asked why do project managers affect the allocation and employment of HRM tools and techniques during PRM processes, Participants two, four, and five elucidated simply to solve problems. Participant four offered a perspective that project manager personalities drive their reasoning why they affect the allocation of HRM tools and techniques during PRM processes (i.e., proactive users see the value whereas reactive users do not understand why it is necessary). Participants one, three, and six suggested the complexity of HR in general is a major contributor to why project managers affect the use of HRM tools and techniques; nevertheless, project managers' effectiveness is contingent upon how integrated HR practitioners and project managers can become.

Interview Question 3.d. When asked How do project managers' level of effectiveness in allocating and employing HRM tools and techniques contribute to PRM process related problems, Participants two, four, and five agreed that is contingent upon communication and how cumbersome HRM tools and techniques are to allocate and employ. Participant five insisted that project manager's level of effectiveness can contribute to cost and resource related problems. Participants one, three, and six emphasized that project managers' level of knowledge related to HRM tools and techniques adds to problems; however, they acknowledged that it is HR practitioners' responsible to train and develop the project managers and project teams to allocate

and employee HRM tools and techniques effectively. Furthermore, Participants one, three, and six urged project managers' inability to allocate and employee HRM tools and techniques effectively will pose a negative impact if a project manager does not understand how to utilize HR to manage human capital and their budget.

Interview Question 3.e. When asked Why do project managers choose to allocate and employee HRM tools and techniques at a particular level of effectiveness during PRM processes, Participants two, four, and five agreed that it is in an effort to solve problems but the benefit of HRM Tools and Techniques are not very clear, so it ultimately is dependent on the project manager's level of experience as a project manager. Participants one, three, and six emphasized that it is contingent upon project manager experience and cohesion with HR practitioners. Participant one pointed out that project managers choose to allocate and employee HRM tools and techniques at a particular level of effectiveness during PRM processes because it is a driver of the outcome of their project.

Interview Question 4. Interview participants were asked to describe the impact caused by ineffective allocation and employment of HRM tools and techniques within their organization? This subsection consisted of three questions. The subquestions were designed to gain an understanding of project manager and HR practitioner perspectives regarding the impact caused by ineffective allocation and employment of HRM tools and techniques on project completion rates, on project team member satisfaction rates, and on project manager and HR practitioner cohesion within their organization.

Interview Question 4.a. When asked to describe the impact caused by ineffective allocation and employment of HRM tools and techniques on project completion rates within their organization, Participants two, four, and five insisted some project managers turn a blind eye

because HRM tools and techniques are too cumbersome. As well, participant five argued to be more effective the project manager needs to look more intuitive with how HRM tools and techniques affect their projects team. Participants one, three, and six insisted the project will not finish on time and within budget without HRM tools and techniques, because HRM tools and techniques are needed to acquire the most effective team upfront.

Interview Question 4.b. When asked to describe the impact caused by ineffective allocation and employment of HRM tools and techniques on project team satisfaction rates within their organization, Participants two, four, and five shared delays from cumbersome HRM tools and techniques causes frustration, which equals low morale and high attrition. Furthermore, Participants two, four, and five agreed project managers need to be more engaged with HR to support and enable project team training to improve use of HRM tools and techniques. Participants one, three, and six emphasized recognition should be proportional to the level of work, and a lack of transparency has a negative impact; therefore, improved technology is a verified need to improve transparency.

Interview Question 4.c. When asked to describe the impact caused by ineffective allocation and employment of HRM tools and techniques on project manager and HR practitioner cohesion within their organization, Participants two, four, and five acknowledged project managers who maintain cohesion with HR will be successful. However, Participants two and five urged not much cohesion exists presently but this can be improved with advanced communication and collaboration technology. Participants one, three, and six expressed any project will have resource management complications if a relationship between HR and PM does not exist during the project. Therefore, Participants three and six advocated it is imperative that roles are well defined in order for a relationship between PM and HR to exist.

Interview Question 5. Interview participants were asked to describe how the level of commitment from each of the following stakeholders influence the allocation and employment of the HRM tools and techniques that facilitate PRM processes at their organization. This subsection consisted of four questions. The subquestions were designed to gain an understanding of project manager and HR practitioner perspectives regarding how the level of commitment from project team members, project managers, HR practitioners, and organizational executive level management influence the allocation and employment of the HRM tools and techniques that facilitate PRM processes at their organization.

Interview Question 5.a. When asked to describe the level of commitment from project team members influence the allocation and employment of the HRM tools and techniques that facilitate PRM processes at their organization, Participants two, four, and five acknowledged the importance of their commitment to the project and team. Participants two and five agreed that project managers in general do not understand how HRM Tools and Techniques affect project team member commitment. Participants one, three, and six emphasized project team member commitment is important because it can impact the project. Participant one insisted project team members need to feel value via HRM Tools and Techniques (e.g., career development and compensation).

Interview Question 5.b. When asked to describe the level of commitment from project managers influence the allocation and employment of the HRM tools and techniques that facilitate PRM processes at their organization, Participants two, four, and five agreed project manager commitment is necessary to know what aspects of the project team can be improved via HRM tools and techniques. As well, Participants two, four, and five agreed project managers need to be committed to communicating HRM Tools and Techniques via advanced technology.

Participants one, three, and six also agreed project managers need to be fully committed no exception because the project team will emulate the PM later on. Participant three emphasized project managers need to share knowledge of HRM tools and techniques to enable teams to work effectively during future projects.

Interview Question 5.c. When asked to describe the level of commitment from HR practitioners who influence the allocation and employment of the HRM tools and techniques that facilitate PRM processes at their organization, Participants two, four, and five emphasized a need for HR practitioners to be committed to using advancing technology to improve transparency, quickness, and effectiveness. As well, Participant four advised some HR practitioners can be seen as bias, so HR practitioners need to remove internal barriers that inhibit the support of project managers and project teams. Participants one, three, and six insisted HR practitioners are SMEs that need to be recognized as strategic business partners. Participant six posited the need for HR practitioners to integrate with project managers and teams to develop PM competencies and show how HRM tools and techniques can benefit project managers and project teams.

Interview Question 5.d. When asked to describe the level of commitment from organizational executives influence the allocation and employment of the HRM tools and techniques that facilitate PRM processes at their organization, Participants two, four, and five echoed organizational executives are needed to set the example and provide resources; as well, they offer an important perspective because they see and can resonate the value of HRM Tools and Techniques with project managers. Participants one, three, and six elucidated organizational executives' importance because they champion many aspects of a project to include the importance of HRM tools and techniques. Participant three also pointed out organizational

executive level management commitment is important because they authorize the resources needed to complete the project.

Interview Question Six. In addition to the five primary interview questions, interview participants were asked if there was anything else that they would like to add? Participants two, four, and five added building an effective relationship with HR practitioners will be a challenge but beneficial, nonetheless. As well, Participant four acknowledged that you have to balance theoretical, reality, and practical perspectives to see the benefit of HRM tools and techniques. Participants one, three, and six agreed this research and future research on the subject is necessary; as well, these questions stimulate the mind to think differently, which with a change in mindset can cause a needed cultural shift in program dynamics.

Interpretation of the Themes

An analysis of the six participants' interview transcripts via coding in NVivo resulted in finding 75 distinct codes that were germane to the 46 preliminary findings. Of those codes, the five most frequently annotated codes for each of the interview participants were mapped out within a Microsoft Excel document. Thirty (30) codes (i.e., see Table 3) were cross referenced to determine repetition amongst the interview participants. The coded notes were then triangulated with dialog that was found within interview transcripts from peer professionals to determine the validity and reliability of their responses as they relate to this research (Creswell & Poth, 2018; Yin, 2018). There were 20 significant codes (i.e., see Table 4) that were reduced into three themes that were used to compare with the aforementioned underlying findings that were discovered during multiple reviews of the transcript data (Creswell & Poth, 2018). The following themes were realized after comparing the prominent code data to the findings that were ascertained during multiple transcript reviews.

A Productive Project Manager and HR Practitioner Relationship is Central to Effective PRM Processes, Policies, and Procedures. The codes that were commensurate with this theme were: PM and HRM Relationship, PM Commitment to Using HRM Tools and Techniques, Communication Issues, HR Competence, Project Managers Effecting the Use of HRM Tools and Techniques, and Effective Use of HR to Manage Resources. These codes were compared with the emergent ideas derived from the findings that were ascertained while reading and listening to each transcript. The thematical translation of these codes formed into the theme: A productive project manager and HR practitioner relationship is central to effective PRM processes, policies, and procedures.

PM and HRM Relationship. Participant five posited there is little to no cohesion with HR practitioners. Participant five expressed the problem that encompasses the HR and PM relationship is the fact that the functions are different; as well, they inherently work independently from one another. From a PM professional perspective, Participant two implied that in general, a project manager is going to go to HR for support if there is a personnel related problem. Otherwise, Participant five insisted, it is only when there are staffing needs many project teams suspect they need support from and engage with HR to meet their requirements. From the HR professional perspective, Participant six emphasized many project management communities often do not understand what they need from HR to hire project team members. Participant six also insisted it is critical for project managers and HR practitioners to get on the same page as soon as a project is chartered.

Participant one emphasized the need to understand the kind of experience project managers have had with HR tools and techniques in the past. Moreover, Participant one pointed out if a project manager comes to HR for support and has a bad experience with any HRM tools

and techniques, they are likely to try to avoid HR in the future. Participant four offered when things are ineffective there can be friction and frustration among the project team members and HR practitioners. According to Participant three, projects can start out totally wrong, if the HR practitioner and the project manager cannot come to an understanding of respecting one another's roles. As well, Participant three insisted the impact can be detrimental for project stakeholders if HR practitioners and project managers cannot come together to work together in order to get the very best team put together to get the project done on time and within budget.

Participant two insisted a project manager who maintains a good working relationship with HR practitioners will be a successful project manager. Participant three also urged the need for project managers and HR practitioners to sustain a very close relationship by trying to learn from one another. Participant five pointed out that project managers have little understanding of the nature of HR business, and there is a general perception that project managers are not going out of their way to try to understand HR strategy; however, if HR processes were clarified and easier to understand and utilize (e.g., implementation of unifying technology), then project managers would be more likely to work with HR practitioners.

Participant six suggested project managers could help HR practitioners look at PRM processes from a different perspective. Participant six also pointed out that HR practitioners should do a better job by taking the initiative to understand what project managers need. Participant three proposed as long as they're listening for one another, HR practitioners can do a good job if they work together as a team with project managers to get the job done.

PM Commitment to Using HRM Tools and Techniques. Participant six explained that project managers' commitment should have a significant influence on the allocation and employment of HRM tools and techniques because project managers should know what HRM

tools and techniques are required to enable and influence their teams to meet their project milestones. However, Participant two counseled at the project manager level, it very much depends on the circumstances and on the maturity of that manager as to whether or not they go to HR if there is a problem. Participant two also pointed out, often times when project managers' work towards solving a hiring problem, rather than going directly to HR, project managers will communicate with someone else in their chain of command who is familiar with HR processes. Moreover, Participant two implied there are many HRM tools and techniques available for organizational operations, but not so much for supporting project teams, which stimulates project managers desire not to commit to work with HR. Participant five also asserted if project managers want to use HRM tools and techniques it is a complicated process, so they often do not commit to using the HRM tools and techniques that are available because the scope of the HRM tools and techniques are not transparent, which lends to a lack of understanding for why the HRM tools and techniques are purposed in the first place. However, Participant three elucidated there are project managers who see the value in their work and there are those who do not; those who do are typically the project managers that are proactive in seeking out HR practitioners for support.

According to Participant six, it is important for project managers to seek out HR practitioners to learn how HR practitioners analyze data and develop the tools and techniques that are designed to support and enable the workforce because HR practitioners are very effective at utilizing their tools and techniques, or any other resources that are available to them, to enable their organization to meet objectives. Participant four agreed that it is very important for project managers to be committed to employing HRM tools and techniques of all attributes (i.e., rewarding, strategic, and/or punitive) to make sure that they are doing the things to facilitate their

projects. Participant six also pressed there needs to be clear and distinct reasons for project managers to know when to use certain HRM tools and techniques so that time and other resources are not wasted on unnecessary steps, and this is something HR needs to consider along with collaboration with project managers.

Participant one insisted project managers know who they need to reach out to for whatever their need is at whatever point they are in the project. However, Participant five asserted on many occasions, technical project managers do not work in close collaboration with HR when looking to develop a project team and figure out how to allocate human capital to that team in order to initiate a project. Participant five also explained that in lieu of acquiring project team members, project managers often seek to fill project team positions from within, and in doing this process, HR is more often times than not consulted on the matter. Nonetheless, Participant three insisted when recruiting, project managers should do their due diligence up front, by working with HR practitioners to fully vet and research the people that are being brought into the team, because project team members should be fully competent and confident to help to achieve project related goals. However, Participant three explained one of the frustrations project managers feel while working with HR practitioners comes from not getting the certification list of eligible candidates for employment to hire people in a timely manner, or their certification list of eligible candidates for employment may not be vetted thoroughly by HR, which results in a cumbersome process to find the right people to hire. Participant three implied there are often occasions where HR practitioners are only processing recruitments to get advertisements out to the public instead of taking initiative to fully understand why the recruitment action is necessary; as well, they are not utilizing all the tools that are available to them. Nevertheless, Participant three insisted if project managers are not committed to utilizing

HRM tools and techniques to enable their project teams, their lack of commitment will be highly visible to project stakeholders; if this is the case, when their team members see that they are not committed, then they are going to follow suit, which will impact future projects.

Communication Issues. The issue of communication was largely referenced by project managers. Participant two implied a lack of communication with HR is going to hurt the project manager over all if there are no efforts to allocate and employee HRM tools and techniques. However, Participant two pointed out that the quantity of projects and programs within a DON command can be a communication barrier because of the overall inherent complexity of those projects and programs; however, this can be overcome with advancements in communication technology. Participant two pointed out that in some DON organizations HR related processes can be shared across various functions, which can result in the entire removal of HR from channels of communication on topics that are germane to the HR function. Moreover, Participant two elucidated the lack of communication between HR and other organizations of the DON have been a long-standing issue. Participant one acknowledged this by explaining HR practitioners typically do not communicate with project managers or project team members as often as they should with respect to the context of a given project. Participant five insisted there is not a lot of communication with HR; however, participant five agreed, there should be better communication with HR to express the kinds of tools and techniques the project manager needs.

Participant five also expressed a potential gap in communication with HR is a result of a lack of transparency with respect to the data maintained by HR; furthermore, much of this data could be utilized to synchronize many organizational functions. Additionally, Participant five appealed for a unification of communication tools with HR, which would enable substantial yields of efficiency with respect to the flow of processes across DON organizations with respect

to human capital management. To that point, Participant one mentioned both project managers and HR practitioners can develop reputations of being hard to work with, which often inhibits communication. However, Participant six encouraged for HR Practitioners to do a better job at communicating strategies regarding how project managers can employ and allocate HRM tools and techniques so that the right people for the job can be allocated to the team and are enabled to successfully complete their project on time and within budget.

HR Competence. Participant six posited HR practitioners are known to be the subject matter experts, so, it is not unlikely for their support and guidance to be sought out by project managers. Moreover, Participant one felt it is incumbent on HR practitioners to show the value of HRM tools and techniques and how those processes work for their benefit to project managers. However, Participant one acknowledged project managers would not find value in HR if they perceived a lack of competency as a catalyst to HR practitioners' lengthy processing timelines. Participant two perceived local HR practitioners as being very competent and are proactive in working to meet organizational needs as they relate to general HRM. Participant two admitted that personnel management does not come naturally to a lot of managers in general, but HR has been very competent and effective in supporting organizational requirements. According to Participant six, although HR practitioners are overall very competent in skills commensurate with HRM tools and techniques, PM skills are a skillset that HR practitioners lack an understanding of, but they would significantly benefit from training to help develop those competencies. Nevertheless, Participant two proclaimed although in a majority of situations HR provides great resources and capabilities, but sometimes there are problems that HR is not capable of supporting; namely, project team requirements in lieu of organizational requirements.

Participant three acknowledge that on most occasions, unfortunately, it is usually found to be incumbent of a staffing specialist to work with project managers, and they are often not in tune with all of the needs of a project team; therefore, other HR competencies should be refined so that those competencies can help to meet the needs of project teams to scale in addition of focusing directly on individual or collectively on organizational needs. Participant three insisted that HR practitioners be provided with career development opportunities to expand their competencies to support strategic innovation such as project teams and other types of organizational roles that develop as the DON evolves. Participant four agreed HR competence is overall pretty high but admitted the overall understanding of the business roles of a project manager for HR practitioners varies based on HR practitioners' extracurricular education that is outside of the normal scope of current HR competencies. Participant six pointed out that there are HR practitioners that have project management skills, and then they either proactively employ those skills, or they react by not employing those skills; notwithstanding, the more HR practitioners know and understand PM competencies, the more likely they will be prepared to employee those skillsets.

Project Managers Effect on the Use of HRM Tools and Techniques. Participant four acknowledged project managers can be pretty good at allocating and employing HRM tools and techniques, but some are better than others. Participant four also implied most project managers are receptive to what is being communicated to them by HR, but there are others who question the need for what they consider to be cumbersome. However, Participant four deferred to a project manager's personality as being a factor in their effect on the use of HRM tools and techniques. Participant four also insisted a project manager's experience as a project manager as being a factor in their effect on the use of HRM tools and techniques. Participant one suggested

in depends on the project manager as to how they would affect the use of HRM tools and techniques. Participant one also felt that project managers can significantly affect how HRM tools and techniques are allocated and employed because their customer feedback will ultimately be a determining factor with respect to what resources HR can be allocated in the future.

Participant two implied often times project managers see very little reason to go to HR to discuss their project team because in most cases project managers approach HR for support to manage individual personnel issues. Nonetheless, Participant three insisted HR practitioners should maximize project team capabilities; however, this is impeded because project managers do not have a good understanding of the HR tools and techniques that are available to them; therefore, they are going to miss out on opportunities to enable their teams to be more efficient and effective. Moreover, Participant five implied that project managers often do not have HRM tools and techniques at their disposal to affect their project teams by their use. Participant five suggested that if the HRM tools and techniques are available, there are many project managers that are not aware of them. Participant three relayed it is dependent upon the perspective of the project manager and their specific goals, of they actively engage HR then they will get the full attention that particular human resources office can provide; on the other hand, if they do not engage HR, then it is a missed opportunity, which is an effect on the use of the HRM tools and techniques afforded to them. Participant three also acknowledged that project managers level of control is a factor in how the effect the allocation and employment of HRM tools and techniques. Participant three expressed project managers; vested interest in a project is also a factor that determines the effect of the use of HRM tools and techniques to support their projects. Nevertheless, Participant six insisted there could be a lot of other outlying factors that mitigate a project manager's ability to effectively utilize HRM tools and techniques.

Effective Use of HR to Manage Resources. Participant five allowed project managers may have a general idea of the nature of HR, but there is little transparency which leads to a real inability to use HR to manage project resources effectively. Interestingly, Participant three pointed out that sometimes project managers find themselves in a world of trouble and their response is to look to HR to clean up their mess even without fully understanding what the real purpose of HR is in the first place. However, Participant five expressed there is essential little to no communication and collaboration with HR to effectively support project teams; therefore, the effective use of HR to manage resources is nil. Participant one acknowledged project managers are not going to find value in a HRM tools and techniques if it takes a lengthy amount of time to process; therefore, project managers may not use HR to manage resources effectively if those process seem too cumbersome. Furthermore, Participant one agreed project managers do not want to spend all their time dealing with HR, so that is a catalyst to the effectiveness of their use of HRM tools and techniques.

Participant three obliged the need for project managers, to have a full-on view of how to maximize their use of HRM tools and techniques because with limited resources, HR can be the answer to a lot of project managers' human capital management problems. Participant three pointed out that it is very likely that project managers do not have a good view of what HRM tools and techniques are available to them in order to be truly effective in maximizing the potential of the human capital within their project team. Overall, Participant six agreed HR needs to do a better job in understanding what is required to support project managers so that they can effectively allocate and employee HRM tools and techniques in order to manage their project resources.

There is Minimal Teamwork between DON Project Managers and DON HR

Practitioners to Form Effective PRM Processes, Policies, and Procedures. The codes that were commensurate with this theme were: Acquire, Control, Develop, Lack of PM Knowledge, Manage, Project Team Satisfaction, Ineffective use of HR to Manage Projects, Integrate PM into HR, and Project Managers Acceptance of HR. These codes were compared with the emergent ideas derived from the findings that were ascertained while reading and listening to each transcript. The thematical translation of these codes formed into the theme: There is minimal teamwork between DON project managers and DON HR practitioners to form effective PRM processes, policies, and procedures.

Acquire. Participant five suggested project managers know if project teams are not staffed appropriately, they must proactively think about how to bring people into the organization and that is one area where project managers should be relying more on HR practitioners. Participant one claimed direct hiring authorities have significantly streamlined the hiring process, which has mitigated many concerns about HR action processing speeds to acquire human capital. Participant five recognized when requested to support the acquisition of personnel, HR practitioners will support project managers by attending career fairs to collect resumes to consider for direct hiring authorities, which can speed the project team member acquisition process up significantly quicker than having to wait for a certificate of eligible candidates that has not been prescreened and vetted by project managers to be released for consideration. Participant three accredited PPP as being the laws, rules and regulations that are the framework for HR practitioners to safeguard project managers and other hiring managers during the hiring process, but sometimes PPP can make the hiring process a daunting task. Moreover, Participant three pointed out when project managers work with HR practitioners to

acquire employees to perform project related work, they must do their due diligence up front to fully vet and research the people they are bringing to the team, because it is imperative to get the right people on the team who are fully competent and confident to help to achieve project related goals; otherwise, the completion timelines for those projects being recruited for can be impacted due to ineffective team members.

Participant four also acknowledged project managers are always hiring people so up-front screening is very important to project team efficiency. Participant one insisted project managers need HR support during the process of acquiring personnel so that candidates can be efficiently and sufficiently screened, which is a positive impact on project team members because they are not overworked by having to pick up the slack from an employee that is not competent enough to perform their project work. Conversely, Participant two maintained the complexity of project managers work requires quick, efficient, and invested action processing from HR practitioners when acquiring human capital. As well, Participant two pointed out that project managers are often not aware of the details associated with the programs that are available to acquire personnel for their project teams, so they often rely on internal integration to support their teams. However, Participant six asserted project team member acquisition would be a much more efficient process if project managers took a more proactive approach to learning what HR has to offer and by supporting recruitment and screening efforts by personally or virtually attending the career fairs that HR practitioners sign up for them to attend. Participant six also emphasized HR practitioners need to do a better job understanding what is required when working to acquire project team members by proactively engaging with project managers to see what particular skillsets are necessary to finish a project on time and within budget.

Control. Participant three advised project managers need to rely on HR practitioners for support at project initiation, milestone check points and project closing. Participant two elucidated to HR being utilized as a measure of control to manage the output of incentives and to guide project managers through the disciplinary action process. Participant two acknowledged having control of a project teams extends beyond a given project and into the realm of retention by retaining project team members for other projects, and that is one area HR support is needed. According to Participant four, there is a constant attrition problem associated with project closure. Participant three offered it is up to project managers to utilize HR practitioner to help guide project team members to understand the person they are and how their skillsets can be utilized effectively in the current project as well as future projects. Participant five presented many project managers are not aware of the tools that HR has available for them to use to control their project teams. Participant five contended project managers rely heavily on technology in lieu of HR practitioners to control project teams; however, if HR was integrated in this technology, and offered transparent guidance, then it could be more effectively realized that HR can be utilized to effectively control a project team. Both Participants one, three, and six pointed out within most DON acquisition mission-oriented organizations project managers implement a measure of control on their project teams with technology via a contribution and performance manage tools (i.e., *Civilian Acquisition Workforce Personnel Demonstration Project*) that organizes incentive output to be distributed based on individual contributions to the organization and their performance. Participant four insisted project managers who do not appropriately recognize the people on their team (i.e., positively or negatively), the current project and future projects will be impacted, and that is a catalyst for the need to look to HR practitioners for the SME and support.

Develop. Participant two pointed out there is not a specific HR development program designed for project team development. Participant five insisted when it comes to developing project teams, HR does not have a training apparatus that is designed to support that need. Participant six agreed that HR should do a better job at integrating PM and HR to develop more effective HRM tools and techniques that focus on project team development. On the other hand, Participant one explained although there are regular annual organizational training and development requirements, project managers must proactively coordinate with HR practitioners to discuss their development needs for their project team members. In addition to project team members, Participant one emphasized project managers also need to commit to their own training and development so they can learn to better serve the needs of their project team. Participant two agreed project managers need to get in and stay involved with HR to partake in their own development because their own development can be crucial for a successful team. Participant three also explained looking at the gaps in project teams will help HR practitioners design training and development plans that are tailored to specific project team needs. As well, Participant three advocated HR needs a career development plan of their own in order to develop the skillsets to support project teams in addition to supporting larger organizational objectives.

Lack of Project Management Knowledge. Participant one pointed out a lack of understanding within HR about what PRM processes, policies, and procedures are and how they are integrated with HR practices. Participant three agreed HR normally does not have a broad depth of understanding about PM in general, so it is a complex task for HR to develop the types of HRM tools and techniques that are able to support project managers. Participant four also shared in a lot of cases HR does not really understand the business of PM because they are stove-piped within all facets of HR. Participant six agreed, HR does need to do a better job of

understanding the various roles with the PM profession so they become aware of and are better prepared to support project team needs. Participant four acknowledged adapting an approach to understanding PRM processes, policies, and procedures is a change of mindset altogether for HR.

Manage. Participants one, two, three, four, five, and six attuned the manage PRM process as being synonymous to performance management. Interestingly, Participant six mentioned project managers manage their project teams by holding regular battle rhythm meetings and drumbeats to talk about key project milestones, which are tasks that HR practitioners are capable of facilitating via HRM tools and techniques. Nonetheless, Participant two offered HR does aid project managers in managing individuals via performance and personnel management techniques (e.g., awards and discipline); however, both Participants two and five agreed, HR does not aid project managers in managing project teams. Moreover, Participant four pointed out it is hard to motivate individual project team members for \$500 or \$600 when relying on performance management to manage project teams. Nevertheless, Participant four shared it is also a factor of project manager competence, experience and personality as it relates to how they use HRM tools and techniques to manage their project teams.

Project Team Satisfaction. Participants one, two, three, four, five, and six agreed project team member satisfaction is important. Participant one ensured unhappy project team members are not going to perform well, which could derail a project and also result in attrition issues. However, Participant three acknowledged there are project team members who are on a project to unwillingly or are generally uninterested, which can result in dissatisfaction with their project team. Participants three and four implied if projected team members become dissatisfied then the

results can be seen in the quality of their work and the resulting deliverables; however, Participant three acknowledged there are project team members who are on a project to unwillingly or are generally uninterested, which can result in dissatisfaction with their project team. Participants four, five, and six referenced frustration and the diminishment of morale amongst project team members as being a major problem for a project, so project managers should do their due diligence by mitigating the issue via employing HRM tools and techniques; however, Participant three acknowledged there are project team members who are on a project to unwillingly or are generally uninterested, which can result in dissatisfaction with their project team.

Ineffective Use of HR to Manage Projects. Participant one maintained a project manager who has had a bad experience with HR is going to be reluctant to seek out HR support in the future because in their minds they feel as if though some or all HRM tools and techniques useless, slow, or too cumbersome to rely on. According to Participant five, some DON organizations do not even rely on HR for position management, and instead only look to HR for support in communicating with OCHR to process hiring actions. Participant five echoed the lack of reliance on HR by advising project managers often do not seek out HR for support in estimating or allocating project team position requirements. Participant five insisted this shortfall could be mitigated by closing the gap in communication with HR via incorporation of more advanced technology.

Integrate PM and HR. Participant one submitted, other than occasionally attending a recruitment event, project managers do not get involved with many HR related functions. Participant six agreed project managers do not seek out HR practitioner support often enough unless it is project team member centric; however, HR does not do a very good job either in

proactively seeking project manager input to enhance HRM tools and techniques. Participants three and six offered HR practitioners and project managers should both take a proactive approach in working together to integrate functionality to better serve DON commissioned projects.

Project Managers Acceptance of HR. Participant one posited if a project manager has a good experience with HR then that project manager is likely to reciprocate that positive experience with peer project managers, thus improving project managers acceptance of HR. Participant two explained acceptance of HR increases as you go up the chain of command. Participant two also offered broadcasting sufficient HR resources should encourage and enhance project managers' interaction and acceptance of HR. Participant three agreed it is important for project managers to have a full-on view of how to maximize their use of the human resources tools and techniques that are available to them. Participant three also acknowledged those project managers who do accept HR is because they have a vested interest; therefore, it is imperative for project managers to exploit the HRM tools and techniques that are available to them or risk failing to complete their project on time and within budget. Participant four implied a lot of project managers are reluctant to accept and follow guidance from HR practitioners because they believe HR will slow the progress of their projects with cumbersome requirements. However, Participant four also acknowledged when HR passes guidance that may delay a project it is because HR is looking out for the best interest of their organization as it relates to the management of human capital.

There are Limited Resources to Enable Productive Project Manager and HR Practitioner Relationships. The codes that were commensurate with this theme were: Technology, Funding is a driver, Executive Influence, Lack of HR Tools to Support PM, and HR

Considering How to Support Project Stakeholders. These codes were compared with the emergent ideas derived from the findings that were ascertained while reading and listening to each transcript. The thematical translation of these codes formed into the theme: There are limited resources to enable productive project manager and HR practitioner relationships.

Technology. Participants one and six informed that as of lately, there has been a major shift towards automation in the HR community. Participant four referenced advancements in technology via the use of improved automation to manage project team members' performance. Participant five insisted data management is central to managing a project team, so in order for project managers to effectively incorporate HRM tools and techniques into their line of business, they need HR to develop ways to be more transparent with their data. Furthermore, Participant five declared employees today are adapting to technology rapidly; therefore, project teams would benefit if HR adapted technology that enabled them to manage data more efficiently to communicate more effectively and efficiently because junior people are young, project managers can direct them on multiple projects. Participant five did acknowledge securing personally identifiable information (PII) is not easy to do, but it is well worth the effort if the investment will safeguard PII and enhance project managers' ability to communicate with supporting stakeholders such as HR. Moreover, Participants one, two, three, four, five, and six all agreed advancements in information technology structure to facilitate work in a virtual environment is essential, especially given how federal civilian employees have adapted to and excelled at working in a mandatory telework environment during the majority of 2020 and on into 2021.

Funding is a Driver. Participant one offered HR practitioners really have to work hard to show their value to the organization in order to secure funding for resources. Participant three acknowledged funding dictates the availability of resources for both HR and PM, so if funding is

not available or scarce, then HR may not be able to provide all of the resources (e.g., career fairs and monetary awards) that a project manager needs to enable the project team. According to Participant three, from a HR perspective, funding may dictate the rate of speed for which HR can assist project managers build their project teams; for example, project managers may have to wait on a certification list of eligible candidates for employment to be released by OCHR in lieu of collecting resumes directly from candidates at a funded career fair. Participant four accredited executive level management as being the final decision at the command level for who receives funding. Participant five advocated and encouraged for executive level management to consider the value of investing funds into technology advancements that will enable the unification of project stakeholder support such as HR. However, Participant five acknowledged it may be harder for smaller DON organizations to justify funding technology adaptation because the return on investment may be hard for some high-level stakeholders to realize.

Executive Influence. Participant four acknowledged executive level management will provide funding, a vision, the mission, structure, and direction for a project, so their commitment to a project is crucial. Participant two corresponded in general executive level management are very HR savvy when it comes to organizational human capital management. As well, Participant five agreed executive level management is generally supportive of HR. However, Participant three suggested sometimes executives tend to forget once they get into executive level work what it was like when they were the specialist, especially if executives lean towards micromanaging a team. Moreover, Participant three admitted it can be very frustrating when an executive directs the execution of a project but does not champion the acquisition of funding to drive the project. Conversely, Participant two implied at the highest levels of management, those executive level managers are more advocates and communicators about the availability of resources, and less

involved in project decision making unless it involves the initiation, milestones, or closure of a project. Nevertheless, Participant six emphasized project teams need a champion, and it is the responsibility of the project manager to keep an executive level manager onboard with supporting project initiatives.

Lack of HR Tools to Support PM. Participants two, four, and five insisted it is hard to imagine what the HRM tools and techniques would be for project managers to allocate and employee in order to plan, estimate, acquire, develop, manage, and control a project team effectively. Participant two felt the need for HR is focused more on supporting managers in general rather than individuals, and even less on supporting project teams. Participant four asserted there can be inconsistent application of HRM tools and techniques by HR if biased towards supporting particular organization goals. Participant five stressed there are generally no known useful HRM tools and techniques available to support and enable project teams. Participant six agreed that HRM tools and techniques that are designed specifically for supporting and enabling project teams are practically nonexistent within the DON.

HR Considering How to Support Stakeholders. Participant one acknowledged it is hard to estimate project managers' needs without their direct integration and involvement in the process of determining the HRM tools and techniques that project managers need to enable their project teams. Participant three pointed out that unfortunately a HR staffing specialist is typically the default HR point of contact for a project manager, which albeit useful, a staffing specialist is not going to be able to facilitate every aspect of project management for a project team. Participant three also found it unfortunate that many HR practitioners do not become invested into the projectized role they play part of as it relates to a project, and instead they view the effort as operation only to go through the processes in order to check all the boxes without becoming

emotionally invested into the project they support. Participant six offered HR is very effective at sharing analytical data during stakeholder briefings, which should help project managers make decisions about their projects and their project teams. Participant six asserted honing in on how HR analyzes data and improving functionality from that standpoint could help to establish better relationships with project managers; as well, the introduction of advanced technology that is capable of projecting data transparently whilst safeguarding PII should help to improve the effectiveness as to how project managers allocate and employ HRM tools and techniques.

Representation and Visualization of the Data

In addition to the literature reviewed depicted in Tables 1 and 2, the data in analysis were collected during semi-structured interviews that occurred between November 23, 2020 and January 15, 2021. As seen in Table 3, there were six interview participants from five DON acquisition mission-oriented organizations total. Three of the interview participants were project managers and the other three interview participant were HR practitioners, namely supervisory human resources specialist within DON acquisition mission-oriented organization that worked within the Washington DC, Maryland, Pennsylvania, Virginia, and West Virginia regional area. Each project manager that participated in a semi-structured interview for this research acknowledged managing at least one DON commissioned project from initiation to closure. Each HR practitioner that participated in a semi-structured interview for this research acknowledged being in their supervisory role for at least one year. The interviews consisted of five subject areas and a supplemental inventory that contained a total of 23 interview questions. The semi-structured interviews were designed to last approximately one hour; as can be seen in Table 3, the interviews did commence and convene within an approximation of the prescribed timeline.

Table 3*Semi-Structured Interview Participation*

DON Federal Civilian Employee	DON Organization	Participant Profession	Interview Date	Interview Questions	Questions Answered	Length of Interview
Participant 1	1	HR	11/23/20	23	23	01:02:57
Participant 2	2	PM	12/23/20	23	23	01:00:27
Participant 3	3	HR	12/29/20	23	23	00:48:20
Participant 4	4	PM	1/5/21	23	23	00:53:46
Participant 5	2	PM	1/6/21	23	23	01:01:45
Participant 6	5	HR	1/15/21	23	23	01:15:14

Table 4*Ranked Dominant Codes Frequencies Discovered During Interview Participation*

	Frequency Ranking 1	Frequency Ranking 2	Frequency Ranking 3	Frequency Ranking 4	Frequency Ranking 5
Participant 1	Lack of Project Management Knowledge	PM and HRM Relationship	Effective Use of HR to Manage Resources	Acquire	Manage
Participant 2	Lack of HR Tools to Support PM	Control	Develop	Acquire	PM and HRM Relationship
Participant 3	PM and HRM Relationship	Project Managers Effecting the Use of HRM Tools and Techniques	Executive Influence	Funding is a Driver	PM Commitment to Using HRM Tools and Techniques
Participant 4	PM and HRM Relationship	Control	Project Team Satisfaction	Manage	Project Managers Acceptance of HR
Participant 5	Technology	Communication Issues	PM and HRM Relationship	Ineffective Use of HR to Manage Projects	Funding is a Driver
Participant 6	Integrate PM into HR	HR Competence	Communication Issues	HR Considering How to Support Project Stakeholders	PM and HRM Relationship

Table 5*Translation of Emergent Ideas and Dominant Codes into Discovered Themes*

Theme	Dominant Codes among Participants	Reference Frequency	Overall Ranking Compared to all Codes	Translated Themes
1	PM and HRM Relationship, PM Commitment to Using HRM Tools and Techniques, Communication Issues, HR Competence, Project Managers Effecting the Use of HRM Tools and Techniques, and Effective Use of HR to Manage Resources	49, 31, 29, 24, 24, & 23	1, 3, 4, 8, 9, & 10	A Productive Project Manager and HR Practitioner Relationship is Central to Effective PRM Processes, Policies, and Procedures
2	Acquire, Control, Develop, Lack of Project Management Knowledge, Manage, Project Team Satisfaction, Ineffective Use of HR to Manage Projects, Integrate PM and HR, and Project Managers Acceptance of HR	25, 24, 23, 22, 19, 19, 17, 17, & 17	5, 6, 11, 13, 14, 16, 20, 21, & 22	There is Minimal Teamwork between DON Project Managers and DON HR Practitioners to Form Effective PRM Processes, Policies, and Procedures
3	Technology, Funding is a Driver, Executive Influence, Lack of HR Tools to Support PM, and HR Considering How to Support Project Stakeholders	36, 24, 17, 15, & 14	2, 7, 19, 25, & 28	There are Limited Resources to Enable Productive Project Manager and HR Practitioner Relationships

Relationship of the Findings

During this analysis of the perspective of six interview participants a total of 46 findings were discovered. A deductive analysis within NVivo resulted in a yield of 75 total codes that were discerned via correlation to the findings. The 75 codes were refined via triangulation of the resulting 46 initial findings from the interview participants' perspectives. The refinement narrowed the scope of focus onto 20 emergent ideas that were frequently referred to amongst each of the interview participants. These 20 emergent ideas were then framed into three themes that were based upon frequency and shared perspectives as they related to each finding. The relationship of these findings are described in context below as they relate to the research

questions, conceptual framework, anticipated themes, literature review, and the research problem.

Relationship of the Findings to the Research Questions. Research questions are the tools of research that are designed to close gaps in research (Leedy & Ormrod, 2015). To posit research questions each question must be definitive in order to codify the validity for each research question (Creswell & Poth, 2018). The research questions below are defined and defended in such a way that should enable the researcher to add a valuable expense to the knowledge bases in both PM and HRM. More specifically, the following research questions are posited in order to explore how DON project managers use HRM in order to plan, estimate, acquire, develop, manage, and control project teams in acquisition mission-oriented organizations of the DON:

RQ₁: What effect does HRM tools and techniques have on the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON?

RQ₂: Why do project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams?

RQ₃: How do project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams?

RQ₄: How is the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON effected by DON project managers' ineffective use of HRM tools and techniques?

Relationship to Research Question One. What effect does HRM tools and techniques have on the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON? As outlined in the PMBOK Guide (6th ed.), developing a project team is the process of improving competencies, team member interaction, and the overall team environment in order to improve project performance (Project Management Institute, 2017). The PMBOK Guide (6th ed.) also points to the key benefit of the manage human resources process, within project management, is that the process influences team behavior, manages conflict, and resolves issues (Project Management Institute, 2017). Therefore, the first research question was intended to help to discover, through review of the literature, various trends that relate to what effect HRM tools and techniques have on the planning, estimation, acquisition, development, management, and control of project teams. According to Abu-Hussein et al. (2016), HRM is inclusive to all aspects of developing and managing a project team, so as themes were discerned through the research, interview questions were formed in order to narrow the scope of the research platform. This research has helped to discern the effect that HRM tools and techniques have on the planning, estimation, acquisition, development, management, and control of project teams; in particular, as it relates to a posture that can be oriented to acquisition mission-oriented organizations of the DON. This research question was be answered through an analysis that was grounded on the correlation of the researcher's professional knowledge of PM and HR, scholarly and procedural literature, and semi structured interviews.

A hypothesized response to research question one is grounded within the findings that formed theme one. The researcher's observation is reflective of HRM tools and techniques generally having a significant effect on organizational operations; however, this is not applicable

to this degree for project teams. Interview participants one, three, and six each expressed similar responses that reflected there are tools and techniques available for supervisors and managers to use, but they are not fashioned to support project teams as is prescribed in Figure 1. Participants two, four, and five also shared similar perspectives; those being, HR is not sought out to support project teams unless there is an individual personnel related problem or the project manager needs to hire a new team member, but even then, the contact is minimal at best. Observation of procedural documentation yielded no content that relates to the effects that HRM tools and techniques have on the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON (DON, 2016, 2017, 2019).

Relationship to Research Question Two. Why do project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams? An et al. (2019) implied that due to the potential impact on overhead resources, project-based organizations often tend to focus on the formation of already competent project teams and less on the development of less competent project teams. An et al. (2019) also suggested that in project-based organizations little attention is paid to the planning, estimation, acquisition, development, management, and control of project teams because of the potential to impact resources and profitability; therefore, the second research question was posited in order to develop a thematic baseline relative to why project managers within acquisition mission-oriented organizations of the DON may use HRM Tools and Techniques ineffectively. The idea was for the baseline to be formed through review of scholarly literature that is germane to the problem statement. Examination of those scholarly works, as well as the perspectives of project managers and HR practitioners revealed trends in

how HRM tools and techniques are ineffectively used to plan, estimate, acquire, develop, manage, and control project teams.

A hypothesized response to research question two is grounded within the findings that formed theme three. The researcher's observation reflected on most occasions project managers do not try negatively affect the allocation and employment of HRM tools and techniques to support their project teams; however, the resources that are available to project managers impact their ability to allocate and employee HRM tools and techniques effectively. Any negative effect is, for the most part due to a lack of understanding by the project manager about what HRM tools and Techniques are available to support and enable project teams. Conversely, HR has a variety of HRM tools and techniques to support the greater organizational needs; however, HR has little to no HRM tools and techniques that are designed with supporting and enabling project teams in mind. Interview Participants two, four, and five each expressed similar responses that reflected no desire to negatively affect processes on purpose for the most part; however, there are occasions where some project managers avoid HR because of the potential delay that may result from PM/HR interaction. Participants one, three, and six agreed there needs to be initiatives enacted to develop integration strategies that will place HR practitioners along with project managers to devise HRM tools and techniques that can support project managers in their efforts to plan, estimate, acquire, develop, manage, and control project teams. Observation of procedural documentation yielded no content that relates to the effects that why project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams (DON, 2016, 2017, 2019).

Relationship to Research Question Three. How do project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams? The third research question was designed to gain an understanding of how project managers ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams. As an example, project-based organizations can benefit by utilizing HRM to plan, estimate, acquire, develop, manage, and control diverse project teams, but those efforts may not be initiated due to a lack of understanding as to how diversified project teams can benefit an organization (Baker et al., 2019). Review of scholarly literature helped to form a basis of understanding; however, interviews with PM stakeholders also helped to narrow down a set of findings, and themes that provide an explanation for such a posture.

A hypothesized response to research question three is grounded within the findings that formed theme two. The researcher's observation reflected project managers do not ineffectively use HRM tools and techniques because HRM tools and techniques specifically designed to support projects are not available for DON project managers; however, when needed, project managers do use operational HRM tools and techniques effectively. In lieu of using HRM tools and techniques to support project teams, project managers rely on HRM tools and techniques that support organizational operational goals, which are altogether outside of the scope and design of project related work. This reflects a lack of teamwork by both project managers and HR practitioners. Once again, interview participants two, four, and five each expressed similar responses that reflected no desire to negatively affect processes on purpose; however, project managers do participate in meetings that require responses to HR related questions, and the mindset is often HR is a project derailer. Participants one, three, and six insisted a clear

distinction of roles should be put in place, so that HR practitioners can coordinate more effectively with project managers; however, HR practitioners expect to be recognized as strategic business partners and not administrative records management paper pushers. All interview participants emphasized enhancements in technology to improve communication would significantly benefit their abilities to communicate more effectively, which in turn should help to integrate HR and PM in order to develop HRM tools and techniques that are designed specifically for project teams. Observation of procedural documentation yielded no content that relates to the effects that how project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams (DON, 2016, 2017, 2019).

Relationship to Research Question Four. How is the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON effected by DON project managers' ineffective use of HRM tools and techniques? According to Anestis and Kleopatra (2017), project managers often face difficulties when it is required for them to assign and subsequently reassign tasks to project team members as a project or projects progress, which is consistent with HRAP theory (Bouajaja & Dridi, 2017). Through efforts to develop project team member competencies, project managers can manage project teams by assigning tasks as required. Therefore, it is necessary to understand how the planning, estimation, acquisition, development, management, and control of project teams can be affected by ineffective use of HRM tools and techniques. The fourth research question was intended to form a thematic description of how the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-

oriented organizations of the DON is affected by DON project managers who ineffectively use HRM tools and techniques.

A hypothesized response to research question four is grounded within the findings that formed themes one, two, and three. The researcher's observation reflected project managers do not intentionally use HRM tools and techniques ineffectively because appropriate project oriented HRM tools and techniques are not available for DON project managers. The effect of not using HRM tools and techniques can be very adverse for project team members; however, if the HRM tools and techniques they need do not exist then that in itself is a problem. Interview Participants two, four, and five each expressed similar responses that reflected no intention of using HRM tools and techniques ineffectively. Participants one, three, and six expressed the level of attention a project manager applies to a project and PRM in particular depends on the level of personal investment applied by the project manager; as well, the ability for project managers to integrate with HR to design and develop effective HRM tools and techniques is contingent upon the relationship between both project managers and HR practitioners and their relative commitment to working as a team to managing project resources. As well, commitment from executive level management and their support are essential in order for project managers to utilize HRM tools and techniques because they are the recognized gatekeepers to the funding that is necessary to allocate and employee resources such as HRM tools and techniques. Observation of procedural documentation yielded no content that relates to the effects how the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON effected by DON project managers' ineffective use of HRM tools and techniques (DON, 2016, 2017, 2019).

Relationship of the Findings to the Conceptual Framework. The conceptual framework helped to organize the ideas that were grounded in the knowledge retained through the researcher's professional experience in both PM and HR career fields. Through the lens of a constructivist paradigm, the researcher was able to subjectively observe six semi-structured interviews and interpret the corresponding responses both directly and inversely by correlating personal experience as a project manager and a HR practitioner (Smith & Shaw, 2019). The themes that stemmed from this research were developed as a result of relating the following concepts and theory to the construct that draws the PM and HR professions together.

Relationship to the Project Management Concept. The concept of PM is relative to all three themes that were identified with the data analysis because it is the foundation of this research. The concept of PM reflects a known beginning and ending, which unlike normal operational roles that HR practitioners within DON acquisition mission-oriented organizations are accustomed (Leite et al., 2017). The project managers who participated in the research were knowledgeable of the concept and offered meaningful interpretations of how the concept of PM is relative to the PRM construct. The HR practitioners had some working knowledge relative to the concept of PM; however, their lack of total understanding helped to distinguish the gaps in their ability to work together as a team between HR practitioners and project managers as it relates to the PRM construct.

Relationship to the Human Resources Management Concept. The concept of HRM is also relative to all three themes that were identified with the data analysis because it is the foundation of this research. Furthermore, Momeni and Martinsuo (2018) emphasized the critical role HRM plays in project-based organizations especially when projects and operational activities occur simultaneously. The HR practitioners who participated in the research were

knowledgeable of the concept and offered meaningful interpretations of how the concept of HRM is relative to the PRM construct. The project managers had some working knowledge relative to the concept of HRM; however, their lack of total understanding helped to distinguish the gaps in their ability to work together as a team between project managers and HR practitioners as it relates to the PRM construct.

Relationship to Human Resources Allocation Problem Theory. Bouajaja and Dridi (2017) pointed out characteristics of the stakeholders affect human resources allocation problem. Given the lack of teamwork that is driven by stakeholder characteristics all three themes are relative to the HRAP theory. As long as project managers and HR practitioners neglect to collaborate ideas on how to effectively incorporate HRM tools and techniques PRM processes, policies, and procedures; communicate efforts relative to PRM processes, policies, and procedures; and work together cohesively, the problem grounded within this research will continue to exist.

Relationship to Project Resources Management Construct. The PRM construct is central to this research because it is the construct that brings the concepts of PM and HRM together. Bouajaja and Dridi (2017) underscored the premier utility of HRM tools and techniques as they relate to the management of PM resources. Therefore, the construct of PRM is relative to all three themes that were discovered during the analysis of the data, as well as the anticipated themes that helped to develop the conceptual framework, and the themes that were discerned from the review of scholarly literature.

Relationship of the Findings to the Anticipated Themes. The anticipated themes that were established during the development of the conceptual framework guided the acquisition of scholarly literature that were commensurate with the purpose of this research. Each of these

anticipated themes do reflect some form of relevance to the themes that were found prominent within the interview data analysis. Furthermore, these themes aided in the alignment of all three perspectives (i.e., scholarly literature, interview participation, and researcher observation) that were applied in the data analysis.

Relationship to Anticipated Theme One. The first anticipated theme was that emerging project teams would do well to establish best practices so that follow-on project teams can follow by example (Ling et al., 2018; Pak et al., 2016; Shaw, 2017). Although this theme does not directly relate to the themes that were discerned from the findings, it does imply an indirect need for a productive relationship between project managers and HR practitioners in order to develop best practices. In particular, this anticipated theme indirectly relates to themes one and two with respect to establishing best practices as they relate to their ability to work together as a team from project managers and HR practitioners to effectively allocate and employ HRM tools and techniques.

Relationship to Anticipated Theme Two. The second anticipated theme was HRM tools and techniques are considered viable functions of PRM that are necessary to enable project managers to share knowledge via training and development opportunities (Nguyen & Hadikusumo, 2017; Shaw, 2017). This theme was found to be accurate in part with respect to HRM tools and techniques being viable; in contrast, project managers found HRM tools particularly viable for recruiting project team members. However, during the interviews Participants two, four, and five clarified project managers are not privy to all of the tools and techniques HR has to offer. On the other hand, Participants one, three, and six made it clear that project manager integration with HR is the only way to develop HRM tools and techniques that

are effective for project managers to plan, estimate, acquire, develop, manage, and control their project teams.

Relationship to Anticipated Theme Three. The third anticipated theme suggested the results of this research will add value to the PM and HRM practices because there is a general perception that although the utility of HRM tools and techniques are not fully understood, HRM tools and techniques are advantageous to all project stakeholders in one or more forms. This anticipated theme is applicable to all three themes that were discerned from the interview data analysis. Moreover, all six interview participants expressed interest in this research, as well as how the research will impact HR and PM bodies of knowledge within the DON.

Relationship of the Findings to the Literature. The scholarly literature reviewed aided in the discovery of themes that guided the development of the data collection plan. The themes discovered during the literature review aided in the design of the interview questions. These interview questions aided the researcher to form themes that were substantiated in the results of the data analysis. Each of those themes share a direct relationship with one or more of the themes that were discovered during an inclusive review of literature that were germane to the concepts, theory, and construct commensurate with the conceptual framework that is grounded in this research

Relationship to Theme One from Literature Review Discovery. The first theme consistent in this case study is that efforts to communicate effectively are catalyst to the ineffective implementation and employment of HRM that is facilitated for project teams within acquisition mission-oriented organizations of the DON (Aust et al., 2015; Basten & Haamann, 2018; Batistič & Kenda, 2018; Berta et al., 2015; Hu, 2019; Hung, 2017; Lin et al., 2018; Matta et al., 2015; Scott-Young et al., 2019; Shaw, 2017; Tansley et al., 2013; Wu et al., 2018). This

theme has a direct relation to themes one and two that were distinguished from the data analysis. In particular, communication was one of the key codes that were translated in NVivo from the interview transcripts that aided in the formation of theme one.

Relationship to Theme Two from Literature Review Discovery. The second theme consistent in this case study is that a lack of project managers' understanding of the full utility of HRM tools and techniques and how they should be effectively allocated in order to support project teams via PM during PRM processes (Basten & Haamann, 2018; Bouajaja & Dridi, 2017; Hu, 2019; Jin et al., 2018; Matta et al., 2015; Scott-Young et al., 2019; Wang, 2018). This theme has a direct relation to theme two from the data analysis. This theme also has an indirect relationship to theme one with respect to the relationship between project managers and HR practitioners that is necessary to reciprocate knowledge relative to the formation of HRM tools and techniques that project managers can use to plan, estimate, acquire, develop, manage and control the human capital resources that make up their project teams.

Relationship to Theme Three from Literature Review Discovery. The third theme consistent in this case study is that engagement by executive level management during projects has an effect on how project managers employ HRM tools and techniques in order to support project teams within acquisition mission-oriented organizations of the DON (An et al., 2019; Bouajaja & Dridi, 2017; Coelho et al., 2015; Hu, 2019; Lee et al., 2018; Matta et al., 2015; Mavi & Standing, 2018; Medina & Medina, 2017; Shojaei & Flood, 2017). This theme has a direct relation to theme three from the data analysis. This theme also has an indirect relationship to themes one and two with respect to the effect of resource availability and how that availability affects the relationship between project managers and HR practitioners that is necessary to reciprocate knowledge relative to the formation of HRM tools and techniques that project

managers can use to plan, estimate, acquire, develop, manage and control the human capital resources that make up their project teams.

Relationship of the Findings to the Research Problem. The specific problem to be addressed in this research is the ineffective use of HRM tools and techniques by project managers within acquisition mission-oriented organizations of the DON to plan, estimate, acquire, develop, manage, and control project teams resulting in the potential for the integrity of the processes of a DON commissioned project to be adversely impacted. The need to explore the perspectives of both project managers and HR practitioners within acquisition mission-oriented organizations of the DON established a precedent to find answers to this research problem so that the resulting input can be analyzed in order to interpret and describe the impact of their relationship. Therefore, the research problem is found to be relative to all three themes that were discovered during the analysis of the data, as well as the anticipated themes that helped to develop the conceptual framework, and the themes that were discerned from the review of scholarly literature.

Summary of the Findings

During the presentation of the findings, interview transcripts from three DON HR practitioners and three DON project managers were analyzed. This analysis consisted of three iterations of interpretation of more than six hours of dialogue (see Table 3) that produced layers of results. The first layer of analysis consisted of 46 initial findings. The second layer of analysis resulted in 75 coded themes, which were consolidated into 20 emergent ideas via analysis with the NVivo software application. The third layer of analysis resulted in a collaboration of the 46 initial findings and the consolidated 20 emergent ideas, which resulted in three distinct themes. The relationships of these three distinct themes were then explored by relating the themes to the

four research questions; the concepts, theory, and construct that aided in the formation of the conceptual framework; the three anticipated themes that were used to ascertain the concepts, theory, and construct that have guided this research; the three themes that were discovered during the review of scholarly literature that is relative to this research; and the central problem that was catalyst to initiate this research.

Application to Professional Practice

The applications to professional practice are a subset of information within this research that was written to provide a foundation for future discussions that are applicable to professional PM and HR practices within DON acquisition mission-oriented organizations. Moreover, the context of future discussions that are stimulated by this research will be supported by the applicability of these findings. In specific, these findings are relative to the professional practice of project managers allocating and employing HRM tools and techniques, via support through integration with HR practitioners to plan, estimate, acquire, develop, manage, and control project team human capital. Furthermore, this application to professional practice also explores how additional research should be commissioned in order to understand other areas of HR and PM that can be improved through implementation of policies, processes, and procedures that can become grounded in the findings of future research. The application to professional practice will conclude with a reflection on the process of completing this research, as well as the biblical perspective of the researcher while conducting the research.

Improving General Business Practice

This research resulted in the identification of three areas within both PM and HR bodies of professional knowledge that can be improved upon. Each of the areas of improvement are centered on a theme that resulted from the findings of this research. Although each area of

improvement is centralized on a particular theme, each improvement to the associated general business practice is an enabler to the surrounding themes; therefore, an improvement to one of the general business practices is an improvement via corollary effect to the other general business practices.

Improving the Effect HRM Tools and Techniques have on PRM Processes, Policies, and Procedures. Consistent with theme one of this research, within DON acquisition mission-oriented organizations, a productive project manager and HR practitioner relationship is central to effective PRM processes, policies, and procedures. Project managers should take a manageable amount of their time from current PM standards and practices to reorient their focus on learning how to develop relationships with supporting stakeholders. In particular, DON project managers need to concentrate on learning how to develop a cohesive and collaborative relationship with supporting HR practitioners. Likewise, leadership within HRO organizations should budget time and resources to enable HR practitioners, or teams of HR practitioners to collaborate with project managers in order to develop HRM tools and techniques that are conducive to the enablement of project teams and other temporary organizations. Fernández et al. (2017) found when project managers engage with HR, the supporting HR practitioners will encourage opportunities to build social relationships, thereby encouraging teamwork which orients project team member focus on organizational performance outcomes. Ahmadi and Peymanfard (2016) implied the effect of expanding social relationship networks (i.e., social capital) will increase productivity of HR practitioners, especially when working with project teams. Therefore, those DON acquisition mission-oriented organizations that commit to developing their social capital by building relationships between project managers and HR practitioners will realize the benefit of employing productive PM/HR relationships.

Improving DON Project Managers Use of HRM Tools and Techniques to Reduce Ineffective Allocation and Employment of those PRM Resources. Consistent with theme two of this research, within DON acquisition mission-oriented organizations, there is minimal teamwork between DON project managers and DON HR practitioners to form effective PRM processes, policies, and procedures. Samimi and Sydow (2021) emphasized there has not been significant research into how HRM tools and techniques can be used to facilitate unusual and/or temporary organizations (e.g., project teams). Nonetheless, the minimal research that has been conducted on this subject matter is catalyst for reason to have project managers work together with HR practitioners to develop new ideas to form processes, policies, and procedures that will benefit temporary organizations such as project teams. The focus of collaboration should be central to the conceptual framework within this research (see Figure 1). DON acquisition mission-oriented organizations should exploit the knowledge of PM competencies maintained by project managers, and the knowledge of HRM competencies maintained by HR practitioners, in order to develop PRM processes, policies, and procedures. These PRM processes, policies, and procedure should enable project managers to effectively allocate and employ HRM tools and techniques, via support from HR practitioners, to plan, estimate, acquire, develop, manage, and control the human capital that make up various temporary project team organizations.

Improving the Use of Resources to Reduce Ineffective Allocation and Employment HRM Tools and Techniques. Consistent with theme three of this research, within DON acquisition mission-oriented organizations, there are limited resources to enable productive project manager and HR practitioner relationships. Fernández et al. (2017), suggested project managers should focus on building stakeholder cohesion by collaborating with HR practitioners in order to display the effect of this form of relationship to internal leadership. This emphasis on

teamwork helps to build trust in executive level management, which in turn, can create new values for the organization by supporting knowledge acquisition and promoting result-oriented competences, further resulting in a project manager's enhanced ability to manage their project teams more effectively (Fernández et al., 2017). Project managers and HR practitioners should work together cohesively by engaging in conversations with executive level management. Their efforts should be collaborated to gain and secure executive level management support for the types of resources that are necessary for project managers and HR practitioners to effectively to allocate and employ HRM tools and techniques to plan, estimate, acquire, develop, manage, and control the human capital that make up various temporary project team organizations. If project managers and HR practitioners are able to effectively show executive level management the benefit of their relationship, then those executive level managers may be inclined to champion initiatives to procure the resources that are necessary to support PRM processes, policies, and procedures.

Potential Application Strategies

This research resulted in the identification of three recommendations for potential application to strategies to improve up areas within both PM and HR bodies of professional knowledge. Each of the potential application strategies are centered on a theme that resulted from the findings of this research. Although each potential application strategies is centralized on a particular theme, each improvement via potential application strategy to the associated general business practice is an enabler to the surrounding themes; therefore, an improvement via potential application strategy to one of the general business practices is an improvement via corollary effect to the other general business practices.

Recommendation One. Consistent with theme one of this research, within DON acquisition mission-oriented organizations, a project manager and HR practitioner relationship that embraces cohesion, collaboration, communication, and an understanding of respective roles and responsibilities (i.e., a productive relationship) is central to effective PRM processes, policies, and procedures. DON acquisition mission-oriented organizations can improve project manager and HR practitioner relationships by allocating individual HR practitioner positions, or teams of HR practitioner positions to support PRM processes, policies, and procedures for projects (i.e., contingent upon the size of the organization). Dedicating operational organization (i.e., non-temporary organizations) HR practitioners to learn how to support temporary organizations (i.e., organizations with a defined starting point and ending point), via HRM tools and techniques is the first step to establishing and/or improving the relationships with project managers. Participants two, four and five suggested HR practitioners are effective SMEs with respect to managing operational organizations, but they are not effective in supporting project teams. Samimi and Sydow (2021) also inferred HR practitioners are essential for organizational leadership to employ so that internal stakeholders can be hired, developed, and retained; however, there has been limited focus on how to involve HR practitioners in supporting temporary organizations such as project teams. Moreover, Participants one, three, and six acknowledged HR practitioners are the organizational SMEs that leadership relies on to support human capital management of operational organizations; however, HR practitioners do lack the full understanding of how to support project teams as effectively as they support their entire operational organization. Participants one, three, and six implied a means to correct this deficiency is for HR practitioners to learn PM skills so that they are knowledgeable when collaborating with project managers. Furthermore, Participants one, three, and six acknowledged

an optimal solution to aggregating this knowledge in order to support project managers is to dedicate HR practitioner to learn about PM and to support project managers and their teams.

Recommendation Two. Consistent with theme two of this research, within DON acquisition mission-oriented organizations, there is little to no cohesion, collaboration, and communication between DON project managers and DON HR practitioners to work together as a team to form effective PRM processes, policies, and procedures, as well as effective HRM tools and techniques that are designed to support project teams. DON acquisition mission-oriented organizations can improve project managers and HR practitioners' relationships by implementing team building strategies to improve their ability to work together as a team in order to form effective PRM processes, policies, and procedures, as well as develop project team oriented HRM tools and techniques by taking steps to integrate project managers with HR practitioners. These steps are necessary in order to develop project manager and HR practitioner relationships, as well as their competencies pertaining to PRM processes, policies, and procedures. All participants in this research indicated an integration of project managers and HR practitioners have become necessary to encourage and stimulate teamwork between project managers and HR practitioners. Project manager and HR practitioner integration is necessary to clarify and communicate the roles and responsibilities that are required to enable project teams to be successful throughout the lifecycle of their respective projects. The first step to resolve incohesive teamwork between project managers and HR practitioners is to implement the dedicated positions referenced in recommendation one of the potential application strategies. When HR practitioner positions are afforded time to dedicate themselves to learning the fundamental elements of PM, they will become literate in the dialogue conveyed to them by project managers. Nonetheless, project managers by default of being an employee within the

given organization may have some immersion with HRM tools and techniques as they apply to the operational organization; however, this research suggests there are areas of HR competencies that project managers can develop through integration with the HR practitioners who have been dedicated to learning PM fundamentals. Moreover, the integration of project managers and HR practitioners is necessary to develop and refine the HRM tools and techniques that are needed to plan, estimate, acquire, develop, manage, and control the human capital that make up various temporary project team organizations that are commensurate with the needs of the DON acquisition mission-oriented organization.

Recommendation Three. Consistent with theme three of this research, within DON acquisition mission-oriented organizations, there are limited resources to enable productive project manager and HR practitioner relationships. Project managers and HR practitioners within DON acquisition mission-oriented organizations can improve their ability to attain and apportion resources to enable project managers and HR practitioners to work together as a team by seeking out executive level managers to champion their efforts to improve project manager and HR practitioner relationships and their understanding of PRM processes, policies, and procedures. All participants in this research agreed championship from executive level management is necessary to secure the resources necessary to manage organizational projects. Any project manager can communicate their need for resources to executive level managers, and project manager may receive a budget of resources constrained by the limitations posed by a lack of transparency for the general need. As an example, Participants two and five were adamant in their justification for a need to implement modernized technology to improve communication with project stakeholders (e.g., HR practitioners). However, without evidence to convey this need for communication (i.e., collaboration with HR practitioners to show cause for need), the

requesting project manager could face the possibility of rejection. By implementing recommendations one and two of these potential application strategies, project managers will have evidence to show executive level managers how their request for resources are justified. As an example, in the case of working together as a team to sustain relationships between project managers and HR practitioners, justification can be in the form of showing executive level managers how the allocation of resources to implement advanced technology will unify project stakeholders by means of streamlined and transparent communication tools. All of the participants in this research shared a similar view point, which inferred the adaptation of modernized technology to improve communication between project stakeholders is certainly necessary.

Summary of Application to Professional Practice

The application to professional practice consisted of three thematically based observations made by the research. The first observation, which was commensurate with theme one, there is a need to improve the effect HRM tools and techniques have on PRM processes, policies, and procedures. The second observation, which was commensurate with theme two, there is a need to improve DON project managers use of HRM tools and techniques to reduce ineffective allocation and employment of those PRM resources. The third observation, which was commensurate with theme three, there is a need to improve the acquisition and use of resources to reduce ineffective allocation and employment of HRM tools and techniques. To mitigate these needs, three potential applications to strategies were recommended. Each recommendation correlated to a specific theme; however, implementation of each recommendation will affect the each of the applications to professional business practices.

Recommendations for Further Study

This research resulted in the identification of three recommendations for further study. Each of the recommendations for further study are centered on a theme that resulted from the findings of this research. Although each recommendation for further study is centralized on a particular theme, the results from those studies can be used to support the other recommended research studies by positing facts that are discerned through the research that has already been conducted. Furthermore, not only will these studies add to PM and HR bodies of knowledge, the results of these studies may also stimulate the need to conduct similarly framed research on other aspect of project management with DON acquisition mission-oriented organizations.

Recommendation One. Consistent with theme one of this research, within DON acquisition mission-oriented organizations, a project manager and HR practitioner relationship that embraces cohesion, collaboration, communication, and an understanding of respective roles and responsibilities (i.e., a productive relationship) is central to effective PRM processes, policies, and procedures. Saldaña (2011) pointed out that grounded theory is complex and multifaceted, and can be used in many different types of research. Therefore, it is recommended for researchers to conduct in-depth qualitative research via grounded theory study to develop a theory that provides a grounded explanation for the dynamics of project managers and HR practitioners relationships by examining the perspectives of all stakeholders affected by DON project managers and DON HR practitioners relationship of DON commissioned projects (Creswell & Poth, 2018). The results of this research can be used to develop quantitative or mixed methods research that can identify factors that affect project managers and HR practitioners' relationships.

Recommendation Two. Consistent with theme two of this research, within DON acquisition mission-oriented organizations, there is little to no cohesion, collaboration, and communication between DON project managers and DON HR practitioners to work together as a team to form effective PRM processes, policies, and procedures. Creswell and Poth (2018) elucidated researchers are able to ascertain shared patterns of behavior within an entire culture sharing group by conducting ethnography research. Therefore, it is recommended for researchers to conduct an in-depth qualitative study via an ethnography research design to study PM and HRM cultural knowledge that has been learned through behaviors that are generated within project teams of DON acquisition mission-oriented organizations (Saldaña, 2011). The patterns of behavior that are discovered during this research will enable researchers to determine the behavioral traits that can help to develop PRM processes, policies, and procedures that will integrate DON project managers and DON HR practitioners in order to develop effective HRM tools and techniques that are necessary to plan, estimate, acquire, develop, manage, and control the human capital that make up various types of DON acquisition mission-oriented organization project teams.

Recommendation Three. Consistent with theme three of this research, within DON acquisition mission-oriented organizations, there are limited resources to enable productive project manager and HR practitioner relationships. This theme implies a need to understand what resources are necessary to enable DON project managers and DON HR practitioners to use HRM tools and techniques in order to plan, estimate, acquire, develop, manage, and control project teams. Merriam and Tisdell (2016) explained qualitative research focuses on understanding through exploration while quantitative research provides justification for findings via measurement. Therefore, it is recommended for researchers to conduct exploratory mixed

methods research to get a general sense of the resources that are most conducive for supporting DON project managers and DON HR practitioners efforts to effectively allocate and employ HRM tools and techniques, then justify those findings via quantitative analysis (Leedy & Ormrod, 2015). The results of this research will give project managers the data they need to collaborate with HR practitioners to acquire and implement the resources that are optimal for supporting project teams with HRM tools and techniques.

Reflections

Reflecting on this multi-site case study upon the effects of project managers use of HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams within DON acquisition mission-oriented organizations, the researcher has come to the realization that three primary factors impact the efforts of DON project managers and DON HR practitioners to effectively allocate and employ HRM tools and techniques; those factors are: Project manager and HR practitioner relationships; Project managers and HR practitioners ability to work together as a team to develop effective PRM processes, policies, and procedures; and the acquisition and utilization of resources to enable HRM tools and techniques to support PRM processes, policies, and procedures. The steps taken to come to this realization has effected the researchers' personal and professional growth. As well, this journey has added clarity to the researcher's Christian Worldview by clarifying the researcher's biblical perspective as to how a Christian Worldview impacts the general business practices of PM and HRM.

Personal and Professional Growth

In addition to making contributions to HR and PM bodies of knowledge, conducting this research has provided the researcher an opportunity to learn about PM and HR from a variety of lenses. These perspectives relate, but are not limited to a project manager's lens, a senior HR

practitioner's lens, as well as through the lenses of a variety of stakeholders found within the works of scholarly HR and PM subject matter experts. The experiences and perspectives that were observed through reading about, seeing emotions in responses, and listening to these professionals has enabled the researcher to widen the aperture of understanding as it pertains to the needs and motivations that drive those professionals. As well, through observation, the researcher has gained an opportunity to explore the many finite factors that influence the behaviors of project stakeholders; in particular, those stakeholders that are affected by PRM processes, policies, and procedures pertaining to the allocation and employment of HRM tools and techniques to plan, estimate, acquire, develop, manage, and control the human capital that is necessary to sustain a project team.

Prior to, and during this research, the researcher has worked in both professional capacities as a HR practitioner and a project manager. During the time before participating in a Master of Business Administration (MBA) degree program, the researcher had little knowledge to decipher how project managers and HR practitioners were supposed to integrate to perform project work, nor was there an internal inclination for the researcher to be concerned with the relationship, or lack thereof, between the aforementioned professionals. As the researcher participated in and completed the MBA program, the researcher developed a concrete understanding of the technical disciplines surrounding both HR and PM professions, but a lack of understanding for the disconnect between the two professions still existed. Moreover, at that point in time, the researcher became encumbered in PM work as a HR practitioner; nonetheless, the researcher was struck with a void of knowledge and understanding why there was no concrete relationships between HR and PM professionals. Furthermore, this lack of teamwork posed a negative effect on the researcher's projects and deliverables. Therefore, the researcher

was inclined to pursue education that would help to ascertain a pinpointed explanation for the phenomena surrounding the PM and HR relationship, or lack thereof.

While participating in the Doctor of Business Administration (DBA) degree program, not only did the researcher gain a broader understanding of the PM and HR professions, but the researcher also learned how to apply advanced research skills and tools to the exploration of the finite intricacies within the PM and HR professions. As the DBA progressed, as well as, the work complexity increased within the researcher's career field, the researcher was able to select a topic that lacked the necessary research that could ultimately improve business processes for many stakeholders. As the dissertation phase of this program has progressed, the researcher has found many new problems to explore. With commitment and dedication to the purpose of future research, the researcher now understands the steps that must be taken to explore the environments surrounding these problems; as well, the researcher now has a grounded understanding of the tools that are necessary to guide future research that will benefit various bodies of knowledge within the field of business.

Biblical Perspective

In the beginning of this research a verse from the Old Testament and a verse from the New Testament were reflected on to guide the development of the research and the researcher's exploration of the subject matter. In the Old Testament verse, King David declared, "Blessed is the man who walks not in the counsel of the wicked, nor stands in the way of sinners, nor sits in the seat of scoffers" (*English Standard Version Bible*, 2008, Psalm 1:1). In the New Testament verse, Luke advised "Pay careful attention to yourselves and to all the flock, in which the Holy Spirit has made you overseers, to care for the church of God, which he obtained with his own blood" (*English Standard Version Bible*, 2008, Acts 20:28). These biblical verses aided the

researcher in discerning the meanings of scholarly perspectives that aided in the development of the research framework. The following biblical verses helped the researcher find meaning in the themes that were discovered during the analysis of the findings. There are sacred scriptures from the Old Testament verse and fulfilled prophecies from the New Testament that are integrated with each discovered theme to affix a meaning to each theme so that the translation is underscored with a Christian Worldview perspective.

Relationships. Consistent with theme one of this research, within DON acquisition mission-oriented organizations, a project manager and HR practitioner relationship that embraces cohesion, collaboration, communication, and an understanding of respective roles and responsibilities (i.e., a productive relationship) is central to effective PRM processes, policies, and procedures. King Solomon once proclaimed: Faithful are the wounds of a friend; profuse are the kisses of an enemy (*English Standard Version Bible*, 2008, Proverbs 27:6). King Solomon had pointed out, although at times advise or guidance from a friend, or in this case a fellow project team member, and/or HR practitioner may not be what is sought after (e.g., could cause issues with project time management), but the guidance is often sound and should be acted on. As well King Solomon warned against actors who may portray themselves having solutions to problems, but their interest often lies only with personal gain. King Solomon pointed out the necessity for a healthy relationship and the need to be cognizant of and cautious when interference to the relationship may occur. Paul the Apostle wisely noted: “Do nothing from rivalry or conceit, but in humility count others more significant than yourselves” (*English Standard Version Bible*, 2008, Philippians 2:3). Paul advised against seeking self-gratification (e.g., to care less about the project team and care more about the personal gains that result from project achievements) and instead realize the significance of others (e.g., project team members

and HR practitioners) to build and sustain a relationship that is bounded together by the humility of the leader (i.e., the project manager).

Teamwork. Consistent with theme two of this research, within DON acquisition mission-oriented organizations, there is little to no cohesion, collaboration, and communication between DON project managers and DON HR practitioners to work together as a team to form effective PRM processes, policies, and procedures. King Solomon posited: “Two are better than one, because they have a good reward for their toil” (*English Standard Version Bible*, 2008, Ecclesiastes 4:9) King Solomon pointed to the value of working with a team. However, Paul insisted: “For if they fall, one will lift up his fellow. But woe to him who is alone when he falls and has not another to lift him up” (*English Standard Version Bible*, 2008, Ecclesiastes 4:10)! Furthermore, King Solomon elaborated on the value of teamwork by emphasizing what should happen if a team is working together through adversity and how adversity could impact a team if that team does not work well together. Paul advised, “And let us consider how to stir up one another to love and good works” (*English Standard Version Bible*, 2008, Hebrews 10:24). From this guidance, Paul sought to show his followers that being a good Christian and doing good deeds should not be done alone; therefore, people should strive to work together for a common good (e.g., project teamwork).

Resources. Consistent with theme three of this research, within DON acquisition mission-oriented organizations, there are limited resources to enable productive project manager and HR practitioner relationships. King David emphasized: “The earth is the LORD’s and the fullness thereof, the world and those who dwell therein, for he has founded it upon the seas and established it upon the rivers” (*English Standard Version Bible*, 2008, Psalm 24:1-2). King David provided comfort by acknowledging Jesus would one day come to deliver eternal

salvation, which is the greatest resource of all. This implication alone clarifies the extent of God's resources, which can be provided if God finds the need necessary. Therefore, project managers should take into consideration if resources are not provided then there is a reason, and those project managers should consider why those resources were not meant to be used by their project team to manage and facilitate their project. Furthermore, Paul insisted, "Do not be anxious about anything, but in everything by prayer and supplication with thanksgiving let your requests be made known to God" (*English Standard Version Bible*, 2008, Philippians 4:6). Paul pointed to the need to seek out God when resources are needed, or thought to be needed; if the need is indeed truly needed, then God will provide the resources that are truly needed.

Summary of Reflections

The reflections of this study comprised of realization of the factors that have stimulated the need to explore the catalyst to the formation of the research problems. Within the reflection the researcher elaborated on the gradual increase in desire to understand the research problems as the researcher progressed through graduate studies. The reflection ended with contemplation on how knowledge and guidance from the Holy Bible help to clarify how the themes that were discovered during this research are ultimately tied to a Christian Worldview. The researcher's Christian Worldview emphasizes how through biblical integration project managers and HR practitioners can understand how the ancient knowledge can aid their ability to solve the problem by applying the guidance to the application of the recommendation business strategies and for further study of the HR and PM professions within and external too DON acquisition mission-oriented organizations.

Summary of Section 3

In the third section of this research the application to professional practice and implications for change were addressed. An overview of the study was provided to set the pace for the presentation of the findings. Within the presentation of the findings the perspective of six interview participants were analyzed, resulting in a total of 46 findings. A deductive analysis within NVivo resulted in a yield of 75 total codes that were discerned via correlation with the findings. The 75 codes were then refined via triangulation of the resulting perspectives from each of the interview participants. The refinement narrowed the scope of focus into 20 emergent ideas that were frequently referred to amongst each of the interview participants. These 20 emergent ideas were then framed into three discovered themes based upon frequency and shared perspectives as they related to each finding. The findings were correlated with the research questions, conceptual framework, anticipated themes, literature review, and the research problem to determine their relationship to the discovered themes. After the relationships were discerned, the application to professional practice was discussed to provide recommendations for improving general business practices, potential applications to strategy, and recommendations for further study. Section 3 closed with a reflection on the study to include personal and professional growth, as well as the application of the researchers' biblical perspective relative to how guidance from both the Old Testament and New Testament can be synthesized via adaptation of a Christian Worldview. This synthesis of knowledge and guidance will enable project managers and HR practitioners to develop relationships to support and enable project teams to work together effectively with HR practitioners to gain the resources needed to ensure the project team works efficiently to complete their project via effective PRM processes, policies, and procedures.

Summary and Study Conclusions

In summary, this qualitative multi-site case study explored the ineffective use of HRM tools and techniques by project managers within acquisition mission-oriented organizations of the DON to plan, estimate, acquire, develop, manage, and control project teams resulting in the potential for the integrity of the processes of a DON commissioned project to be adversely impacted. The research questions addressed in this study were:

RQ₁: What effect does HRM tools and techniques have on the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON?

RQ₂: Why do project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams?

RQ₃: How do project managers within acquisition mission-oriented organizations of the DON ineffectively use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams?

RQ₄: How is the planning, estimation, acquisition, development, management, and control of project teams within acquisition mission-oriented organizations of the DON effected by DON project managers' ineffective use of HRM tools and techniques?

To answer these research questions the researcher conducted a review of scholarly literature and publicly assessable operating procedures and strategies, directly observed HR and PM practices, and analyzed participant responses from DON project managers and HR practitioners who participated in semi-structured interviews. The data collected during the

aforementioned observations were analyzed under the view of a constructivist lens and a Christian Worldview perspective.

In conclusion, the data analysis resulted in the following themes: (a) within DON acquisition mission-oriented organizations, a productive project manager and HR practitioner relationship is central to effective PRM processes, policies, and procedures; (b) within DON acquisition mission-oriented organizations, there is incohesive teamwork between DON project managers and DON HR practitioners to form effective PRM processes, policies, and procedures; and (c) within DON acquisition mission-oriented organizations, there are limited resources to enable productive project manager and HR practitioner relationships. Based on these findings, the researcher recommended the following applications to business practices: (a) DON acquisition mission-oriented organizations can improve project manager and HR practitioner relationships by allocating individual HR practitioner positions, or teams of HR practitioner positions to support PRM processes, policies, and procedures for projects (i.e., contingent upon the size of the organization); (b) DON acquisition mission-oriented organizations can improve project managers and HR practitioners' relationships by implementing team building strategies to improve their ability to work together as a team in order to form effective PRM processes, policies, and procedures by taking steps to integrate project managers with HR practitioners; and (c) project managers and HR practitioners within DON acquisition mission-oriented organizations can improve their ability to attain and apportion resources to enable project managers and HR practitioners to work together as a team by seeking out executive level managers to champion their efforts to improve project manager and HR practitioner relationships and their understanding of PRM processes, policies, and procedures. To continue adding to the bodies of HR and PM bodies of knowledge, the researcher recommends: (a) researchers conduct

in depth qualitative research via grounded theory study to develop a theory that provides a grounded explanation for the dynamics of project managers and HR practitioners relationships by examining the perspectives of all stakeholders affected by DON project managers and DON HR practitioners relationships during DON commissioned projects (Creswell & Poth, 2018); (b) conduct an in-depth qualitative study via ethnography research to study PM and HRM cultural knowledge that has been learned through behaviors that are generated within project teams of DON acquisition mission-oriented organizations (Saldaña, 2011); and (c) conduct exploratory mixed methods research to get a general sense of the resources that are most conducive for supporting DON project managers and DON HR practitioners efforts to effectively allocate and employ HRM tools and techniques, then justify those findings via quantitative analysis (Leedy & Ormrod, 2015). Therefore, project managers and HR practitioners of DON acquisition mission-oriented organization can work together to effectively allocate and employ HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects successfully by focusing on building their professional relationships to work together cohesively as a team, and by effectively communicating their needs for resources to organizational executive level management.

References

- Abma, T. A., & Stake, R. E. (2014). Science of the particular: An advocacy of naturalistic case study in health research. *Qualitative Health Research, 24*(8), 1150–1161.
<https://doi.org/10.1177/1049732314543196>
- Abu-Hussein, R., Hyassat, M., Sweis, R., Alawneh, A., & Al-Debei, M. (2016). Project management factors affecting the enterprise resource planning projects' performance in Jordan. *Journal of Systems and Information Technology, 18*(3), 230–254.
<https://doi.org/10.1108/JSIT-03-2016-0020>
- Ahmadi, S., & Peymanfard, M. (2016). The effect of social capital on improving productivity of human resources in the project of engineering, procurement and construction Bandar Abbas gas condensate refinery. *Journal of Fundamental and Applied Sciences, 8*(2), 1515–1522. <https://doi.org/10.4314/jfas.v8i2s.72>
- An, N., Qiang, M., Wen, Q., Jiang, H., & Xia, B. (2019). Contribution of project managers' capability to project ending performance under stressful conditions. *European Management Journal, 37*(2), 198–209. <https://doi.org/10.1016/j.emj.2018.04.001>
- Anestis, S., & Kleopatra, P. (2017). Exploring of the consequences of human resources multitasking in industrial automation projects: A tool to mitigate impacts. *Procedia Engineering, 196*, 738–745. <https://doi.org/10.1016/j.proeng.2017.08.000>
- Anholon, R., & Sano, A. T. (2016). Analysis of critical processes in the implementation of lean manufacturing projects using project management guidelines. *The International Journal of Advanced Manufacturing Technology, 84*(9), 2247–2256.
<https://doi.org/10.1007/s00170-015-7865-9>

- Aust, I., Brandl, J., & Keegan, A. (2015). State-of-the-art and future directions for HRM from a paradox perspective: Introduction to the special issue. *German Journal of Human Resource Management: Zeitschrift Für Personalforschung*, 29(3-4), 194–213.
<https://doi.org/10.1177/239700221502900303>
- Baker, M., Ali, M., & French, E. (2019). The impact of women's representation on performance in project-based and non-project-based organizations. *International Journal of Project Management*, 37(7), 872–883. <https://doi.org/10.1016/j.ijproman.2019.06.001>
- Ballesteros-Pérez, P., González-Cruz, C. & Fernández-Diego, M. (2012). Human resource allocation management in multiple projects using sociometric techniques. *International Journal of Project Management*, 30(8), 901–913.
<https://doi.org/10.1016/j.ijproman.2012.02.005>
- Batistič, S., & Kenda, R. (2018). Toward a model of socializing project team members: An integrative approach. *International Journal of Project Management*, 36(5), 687–700.
<https://doi.org/10.1016/j.ijproman.2018.03.003>
- Becker, K., & Smidt, M. (2015). Workforce-related risks in projects with a contingent workforce. *International Journal of Project Management*, 33(4), 889–900.
<https://doi.org/10.1016/j.ijproman.2014.10.014>
- Blomquist, T., Farashah, A. D., & Thomas, J. (2018). Feeling good, being good and looking good: Motivations for, and benefits from, project management certification. *International Journal of Project Management*, 36(3), 498–511.
<https://doi.org/10.1016/j.ijproman.2017.11.006>

- Bouajaja, S., & Dridi, N. (2017). A survey on human resource allocation problem and its applications. *Operational Research*, *17*(2), 339–369. <https://doi.org/10.1007/s12351-016-0247-8>
- Bryant, A., & Charmaz, K. (2015). *The SAGE handbook of grounded theory*. Sage.
- Celkevicius, R., & Russo, R. F. S. M. (2018). An integrated model for allocation and leveling of human resources in IT projects. *International Journal of Managing Projects in Business*, *11*(2), 234–256. <https://doi.org/10.1108/IJMPB-09-2016-0074>
- Chandra, Y., & Shang, L. (2017). An RQDA-based constructivist methodology for qualitative research. *Qualitative Market Research: An International Journal*, *20*(1), 90–112. <https://doi.org/10.1108/QMR-02-2016-0014>
- Chen, R., Liang, C., Gu, D., & Leung, J. Y. (2017). A multi-objective model for multi-project scheduling and multi-skilled staff assignment for IT product development considering competency evolution. *International Journal of Production Research*, *55*(21), 6207–6234. <https://doi.org/10.1080/00207543.2017.1326641>
- Chofreh, A., Goni, F. A., Ismail, S., Mohamed Shaharoun, A., Klemeš, J. J., & Zeinalnezhad, M. (2016). A master plan for the implementation of sustainable enterprise resource planning systems (part I): Concept and methodology. *Journal of Cleaner Production*, *136*, 176–182. <https://doi.org/10.1016/j.jclepro.2016.05.140>
- Chofreh, A. G., Goni, F. A., & Klemeš, J. J. (2017). Development of a roadmap for sustainable enterprise resource planning systems implementation (part II). *Journal of Cleaner Production*, *166*, 425–437. <https://doi.org/10.1016/j.jclepro.2017.08.037>

- Chofreh, A. G., Goni, F. A., & Klemeš, J. J. (2018). A roadmap for sustainable enterprise resource planning systems implementation (part III). *Journal of Cleaner Production*, *174*, 1325–1337. <https://doi.org/10.1016/j.jclepro.2017.10.285>
- Coelho, J. P., Cunha, R. C., Gomes, J. F. S., & Correia, A. G. (2015). Strength of the HRM system: The development of a measure. *Journal of Industrial Engineering and Management*, *8*(4), 1069–1086. <https://doi.org/10.3926/jiem.1432>
- Crane, A., Henriques, I., Husted, B., & Matten, D. (2017). Measuring corporate social responsibility and impact: Enhancing quantitative research design and methods in business and society research. *Business & Society*, *56*(6), 787–795. <https://doi.org/10.1177/0007650317713267>
- Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.
- Creswell, J., & Poth, C. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Sage.
- Darling, E., & Whitty, S. (2016). The project management office: It's just not what it used to be. *International Journal of Managing Projects in Business*, *9*(2), 282–308. <https://doi.org/10.1108/IJMPB-08-2015-0083>
- de Rooij, M. M. G., Janowicz-Panjaitan, M., & Mannak, R. S. (2019). A configurational explanation for performance management systems' design in project-based organizations. *International Journal of Project Management*, *37*(5), 616–630. <https://doi.org/10.1016/j.ijproman.2019.03.002>

Demirkesen, S., & Ozorhon, B. (2017). Measuring project management performance: Case of construction industry. *Engineering Management Journal*, 29(4), 258–277.

<https://doi.org/10.1080/10429247.2017.1380579>

Department of the Navy Acquisition Workforce Fiscal Years 2016 – 2022 Strategic Plan. United States Navy, Washington, DC. (2016).

Department of the Navy Defense Acquisition Workforce Improvement Act Operating Guide. United States Navy, Washington, DC. (2017).

Department of the Navy Defense, Naval Sea Systems Command Human Capital Systems and Performance Leadership, 2018/19 Bridging The Gap Action Learning Project United States Navy, Washington, DC. (2019).

Djedovic, A., Karabegovic, A., Avdagic, Z., & Omanovic, S. (2018). Innovative approach in modeling business processes with a focus on improving the allocation of human resources. *Mathematical Problems in Engineering*, 2018, 1–14.

<https://doi.org/10.1155/2018/9838560>

Eckerd, A., & Snider, K. (2017). Does the program manager matter? New public management and defense acquisition. *The American Review of Public Administration*, 47(1), 36–57.

<https://doi.org/10.1177/0275074015596376>

Ekambaram, A., Sørensen, A. Ø., Bull-Berg, H., & Olsson, N. O. E. (2018). The role of big data and knowledge management in improving projects and project-based organizations.

Procedia Computer Science, 138, 851–858. <https://doi.org/10.1016/j.procs.2018.10.111>

Ekström, D., Rempling, R., & Plos, M. (2019). Integrated project team performance in early design stages - performance indicators influencing effectiveness in bridge design.

Architectural Engineering and Design Management, 15(4), 249–266.

<https://doi.org/10.1080/17452007.2018.1563521>

Ershadi, M. J., Najafi, N., & Soleimani, P. (2019). Measuring the impact of soft and hard total quality management factors on customer behavior based on the role of innovation and continuous improvement. *The TQM Journal*, 31(6), 1093–1115.

<https://doi.org/10.1108/TQM-11-2018-0182>

Facility Security Clearance and Safeguarding of National Security Information and Restricted Data, 10 C.F.R. § 95.17(4) (1992).

Farashah, A. D., Thomas, J., & Blomquist, T. (2019). Exploring the value of project management certification in selection and recruiting. *International Journal of Project Management*, 37(1), 14–26. <https://doi.org/10.1016/j.ijproman.2018.09.005>

Felberbauer, T., Gutjahr, W. J., & Doerner, K. F. (2019). Stochastic project management: Multiple projects with multi-skilled human resources. *Journal of Scheduling*, 22(3), 271–288. <https://doi.org/10.1007/s10951-018-0592-y>

Fernández, L., Ventura, A. C., Andrade, J. C., Lumbreras, J., & Cobo-Benita, J. R. (2017). The effect of clean development mechanism projects on human resource management practices in Brazil. *International Journal of Operations & Production Management*, 37(10), 1348–1365. <https://doi.org/10.1108/IJOPM-06-2015-0380>

- Ferraris, A., Erhardt, N., & Bresciani, S. (2019). Ambidextrous work in smart city project alliances: Unpacking the role of human resource management systems. *The International Journal of Human Resource Management*, 30(4), 680–701.
<https://doi.org/10.1080/09585192.2017.1291530>
- Guinan, P., Parise, S., & Langowitz, N. (2019). Creating an innovative digital project team: Levers to enable digital transformation. *Business Horizons*, 62(6), 717–727.
<https://doi.org/10.1016/j.bushor.2019.07.005>
- Haddock-Millar, J., Sanyal, C., & Müller-Camen, M. (2016). Green human resource management: A comparative qualitative case study of a United States multinational corporation. *The International Journal of Human Resource Management*, 27(2), 192–211. <https://doi.org/10.1080/09585192.2015.1052087>
- Hong, T., Ju, H. Y., & Luo, C. T. (2014). Characteristic Analysis and Management of Human Resource in EPC Project. In *Applied Mechanics and Materials* (Vol. 638, pp. 2319-2322). Trans Tech Publications Ltd.
- Huemann, M. (2010). Considering human resource management when developing a project-oriented company: Case study of a telecommunication company. *International Journal of Project Management*, 28(4), 361–369. <https://doi.org/10.1016/j.ijproman.2010.02.008>
- Huemann, M., Keegan, A., & Turner, J. (2007). Human resource management in the project-oriented company: A review. *International Journal of Project Management*, 25(3), 315–323. <https://doi.org/10.1016/j.ijproman.2006.10.001>
- Hung, C. (2017). Social networks, technology ties, and gatekeeper functionality: Implications for the performance management of R&D projects. *Research Policy*, 46(1), 305–315.
<https://doi.org/10.1016/j.respol.2016.11.009>

- Hur, H. (2018). The unintended consequences of a pay-for-performance rule change. *International Journal of Public Sector Management*, 31(6), 654–671.
<https://doi.org/10.1108/IJPSM-09-2016-0147>
- Huzooree, G., & Ramdoo, V. D. (2015). Review of effective human resource management techniques in agile software project management. *International Journal of Computer Applications*, 114(5), 10–15. <https://doi.org/10.5120/19972-1860>
- Jin, G., Sperandio, S., & Girard, P. (2019). Management of the design process: Human resource allocation and project selection in factories of the future. *Insight*, 22(4), 17–19.
<https://doi.org/10.1002/inst.12268>
- Jin, H., Shen, L., & Wang, Z. (2018). Mapping the influence of project management on project cost. *KSCE Journal of Civil Engineering*, 22(9), 3183–3195.
<https://doi.org/10.1007/s12205-018-0397-8>
- Jørgensen, F., & Becker, K. (2017). The role of HRM in facilitating team ambidexterity. *Human Resource Management Journal*, 27(2), 264–280. <https://doi.org/10.1111/1748-8583.12128>
- Kalu, M. E. (2019). Using emphasis-purposeful sampling-phenomenon of interest–context (EPPiC) framework to reflect on two qualitative research designs and questions: A reflective process. *The Qualitative Report*, 24(10), 2524–2535.
<https://nsuworks.nova.edu/tqr/vol24/iss10/9/>
- Karambelkar, M., & Bhattacharya, S. (2017). Onboarding is a change. *Human Resource Management International Digest*, 25(7), 5–8. <https://doi.org/10.1108/HRMID-04-2017-0073>

- Keane, R. G., Fireman, H., Hough, J. J., & Cooper, K. (2009). A human capital strategy for ship design acquisition workforce improvement: The US navy's center for innovation in ship design: A HCS for ship design acquisition workforce improvement. *Naval Engineers Journal*, 121(4), 45–67. <https://doi.org/10.1111/j.1559-3584.2009.00227.x>
- Keegan, A., Ringhofer, C., & Huemann, M. (2018). Human resource management and project based organizing: Fertile ground, missed opportunities and prospects for closer connections. *International Journal of Project Management*, 36(1), 121–133. <https://doi.org/10.1016/j.ijproman.2017.06.003>
- Kong, Y., Khan, R., & Imran, M. (2018). Willpower of retentive factors in job level and recital human resource management in project. *International Journal of Learning and Development*, 8(1), 194–250. <https://doi.org/10.5296/ijld.v8i1.12173>
- Lee, J. Y., Park, S., & Baker, R. (2018). The moderating role of top management support on employees' attitudes in response to human resource development efforts. *Journal of Management & Organization*, 24(3), 369–387. <https://doi.org/10.1017/jmo.2017.37>
- Leedy, P., & Ormrod, J. (2015). *Practical research: Planning and design* (11th ed.). Pearson.
- Leite, M., Baptista, A. J., & Ribeiro, A. M. R. (2017). A trap of optimizing skills use when allocating human resources to a multiple projects environment. *Team Performance Management: An International Journal*, 23(3-4), 110–123. <https://doi.org/10.1108/TPM-04-2016-0013>
- Lin, J., Shen, P. F., & Lee, B. (2018). CAD of human resource configuration in project scheduling for construction engineering applications. *Computer Applications in Engineering Education*, 26(5), 1255–1269. <https://doi.org/10.1002/cae.21999>

- Ling, F. Y. Y., Ning, Y., Chang, Y. H., & Zhang, Z. (2018). Human resource management practices to improve project managers' job satisfaction. *Engineering, Construction and Architectural Management*, 25(5), 654–669. <https://doi.org/10.1108/ECAM-02-2017-0030>
- Malecic, A. (2017). Footprints of general systems theory. *Systems Research and Behavioral Science*, 34(5), 631–636. <https://doi.org/10.1002/sres.2484>
- Mavi, R. K., & Standing, C. (2018). Critical success factors of sustainable project management in construction: A fuzzy DEMATEL-ANP approach. *Journal of Cleaner Production*, 194, 751–765. <https://doi.org/10.1016/j.jclepro.2018.05.120>
- Mazzucato, M. (2018). Mission-oriented innovation policies: Challenges and opportunities. *Industrial and Corporate Change*, 27(5), 803–815. <https://doi.org/10.1093/icc/dty034>
- Medina, R., & Medina, A. (2014). The project manager and the organisation's long-term competence goal. *International Journal of Project Management*, 32(8), 1459–1470. <https://doi.org/10.1016/j.ijproman.2014.02.011>
- Medina, R., & Medina, A. (2017). Managing competence and learning in knowledge-intensive, project-intensive organizations. *International Journal of Managing Projects in Business*, 10(3), 505–526. <https://doi.org/10.1108/IJMPB-04-2016-0032>
- Merriam, S., & Tisdell, E. (2016). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.
- Mesároš, P., Behúnová, A., Mandičák, T., Behún, M., & Krajníková, K. (2019). Impact of enterprise information systems on selected key performance indicators in construction project management: An empirical study. *Wireless Networks*, 1–8. <https://doi.org/10.1007/s11276-019-02048-w>

- Miles, M. B., Huberman, A. M., & Saldaña, J. (2018). *Qualitative data analysis: A methods sourcebook* (4th ed.). Sage.
- Momeni, K., & Martinsuo, M. M. (2018). Allocating human resources to projects and services in dynamic project environments. *International Journal of Managing Projects in Business*, *11*(2), 486–506. <https://doi.org/10.1108/IJMPB-07-2017-0074>
- Nguyen, H. T., & Hadikusumo, B. (2017). Impacts of human resource development on engineering, procurement, and construction project success. *Built Environment Project and Asset Management*, *7*(1), 73–85. <https://doi.org/10.1108/BEPAM-04-2016-0010>
- Nguyen, H. T., & Hadikusumo, B. H. W. (2018). Human resource related factors and engineering, procurement, and construction (EPC) project success. *Journal of Financial Management of Property and Construction*, *23*(1), 24–39. <https://doi.org/10.1108/JFMPC-05-2016-0023>
- Pak, A., Carden, L. L., & Kovach, J. V. (2016). Integration of project management, human resource development, and business teams: A partnership, planning model for organizational training and development initiatives. *Human Resource Development International*, *19*(3), 245–260. <https://doi.org/10.1080/13678868.2016.1141606>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Peters, W., Doskey, S., & Moreland, J. (2017). Technology maturity assessments and confidence intervals. *Systems Engineering*, *20*(2), 188–204. <https://doi.org/10.1002/sys.21389>

- Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford University Press.
- Plaza, M. (2016). Balancing the costs of human resources on an ERP project. *Omega*, 59, 171–183. <https://doi.org/10.1016/j.omega.2015.06.005>
- Popaitoon, S., & Siengthai, S. (2014). The moderating effect of human resource management practices on the relationship between knowledge absorptive capacity and project performance in project-oriented companies. *International Journal of Project Management*, 32(6), 908–920. <https://doi.org/10.1016/j.ijproman.2013.12.002>
- Pournader, M., Tabassi, A. A., & Baloh, P. (2015). A three-step design science approach to develop a novel human resource-planning framework in projects: The cases of construction projects in USA, Europe, and Iran. *International Journal of Project Management*, 33(2), 419–434. <https://doi.org/10.1016/j.ijproman.2014.06.009>
- Probation on Initial Appointment to a Supervisory or Managerial Position, 5 C.F.R. § 315 (1979).
- Probation on Initial Appointment to a Competitive Position, 5 C.F.R. § 315 (2000).
- Project Management Institute. (2017). *A guide to the project management body of knowledge* (PMBOK guide; 6th ed.). Project Management Institute.
- Rahmanniyay, F., & Yu, A. J. (2019). A multi-objective stochastic programming model for project-oriented human-resource management optimization. *International Journal of Management Science and Engineering Management*, 14(4), 231–239. <https://doi.org/10.1080/17509653.2018.1534220>

- Rendon, R. G. (2015). Benchmarking contract management process maturity: A case study of the US navy. *Benchmarking: An International Journal*, 22(7), 1481–1508.
<https://doi.org/10.1108/BIJ-10-2014-0096>
- Rendon, J. M., & Rendon, R. G. (2016). Procurement fraud in the US department of defense: Implications for contracting processes and internal controls. *Managerial Auditing Journal*, 31(6–7), 748–767. <https://doi.org/10.1108/MAJ-11-2015-1267>
- Rihm, T., Trautmann, N., & Zimmermann, A. (2018). MIP formulations for an application of project scheduling in human resource management. *Flexible Services and Manufacturing Journal*, 30(4), 609–639. <https://doi.org/10.1007/s10696-016-9260-8>
- Ritschel, J. D. (2012). Efficacy of US legislation in military acquisition programmes: Nunn–McCurdy act unveiled. *Economic Papers: A Journal of Applied Economics and Policy*, 31(4), 491–500. <https://doi.org/10.1111/1759-3441.12000>
- Saldaña, J. (2011). *Fundamentals of qualitative research*. Oxford University Press.
- Salovaara, P., & Bathurst, R. (2018). Power-with leadership practices: An unfinished business. *Leadership*, 14(2), 179–202. <https://doi.org/10.1177/1742715016652932>
- Samimi, E., & Sydow, J. (2021). Human resource management in project-based organizations: Revisiting the permanency assumption. *International Journal of Human Resource Management*, 32(1), 49–83. <https://doi.org/10.1080/09585192.2020.1783346>
- Sandhu, M., & Khan, A. (2017). Benchmarking project management dimensions at the lapse of a century. *Benchmarking: An International Journal*, 24(6), 1675–1689.
<https://doi.org/10.1108/BIJ-03-2016-0043>

- Schneider, A., Wickert, C., & Marti, E. S. (2017). Reducing complexity by creating complexity: A systems theory perspective on how organizations respond to their environments. *Journal of Management Studies*, 54(2), 182–208. <https://doi.org/10.1111/joms.12206>
- Scott-Young, C. M., Georgy, M., & Grisinger, A. (2019). Shared leadership in project teams: An integrative multi-level conceptual model and research agenda. *International Journal of Project Management*, 37(4), 565–581. <https://doi.org/10.1016/j.ijproman.2019.02.002>
- Shahzad, K., Bajwa, S., Ansted, R., Mamoon, D., & Rehman, K. (2016). Evaluating human resource management capacity for effective implementation of advanced metering infrastructure by electricity distribution companies in Pakistan. *Utility Policy*, 41, 107–117. <https://doi.org/10.1016/j.jup.2016.06.011>
- Shanock, L. R., Eisenberger, R., Heggstad, E. D., Malone, G., Clark, L., Dunn, A. M., Kirkland, J., & Woznyj, H. (2019). Treating employees well: The value of organizational support theory in human resource management. *The Psychologist-Manager Journal*, 22(3-4), 168–191. <https://doi.org/10.1037/mgr0000088>
- Shaw, D. (2017). Managing people and learning in organisational change projects. *Journal of Organizational Change Management*, 30(6), 923–935. <https://doi.org/10.1108/JOCM-11-2016-0253>
- Shojaei, A., & Flood, I. (2017). Stochastic forecasting of project streams for construction project portfolio management. *Visualization in Engineering*, 5(1), 1–13. <https://doi.org/10.1186/s40327-017-0049-y>
- Smirnoff, J. P., & Hicks, M. J. (2008). The impact of economic factors and acquisition reforms on the cost of defense weapon systems. *Review of Financial Economics*, 17(1), 3–13. <https://doi.org/10.1016/j.rfe.2007.02.005>

- Smith, C., & Shaw, D. (2019). The characteristics of problem structuring methods: A literature review. *European Journal of Operational Research*, 274(2), 403–416.
<https://doi.org/10.1016/j.ejor.2018.05.003>
- Soda, G., & Furlotti, M. (2017). Bringing tasks back in: An organizational theory of resource complementarity and partner selection. *Journal of Management*, 43(2), 348–375.
<https://doi.org/10.1177/0149206314535435>
- Söderlund, J. (2011). Pluralism in project management: Navigating the crossroads of specialization and fragmentation. *International Journal of Management Reviews*, 13(2), 153–176. <https://doi.org/10.1111/j.1468-2370.2010.00290.x>
- Stake, R. E. (2010). *Qualitative research: Studying how things work*. Guilford Press.
- Sykes, B., Verma, A., & Hancock, B. (2018). Aligning sampling and case selection in quantitative-qualitative research designs: Establishing generalizability limits in mixed-method studies. *Ethnography*, 19(2), 227–253.
<https://doi.org/10.1177/1466138117725341>
- Tansley, C., Huang, J., & Foster, C. (2013). Identity ambiguity and the promises and practices of hybrid e-HRM project teams. *Journal of Strategic Information Systems*, 22(3), 208–224.
<https://doi.org/10.1016/j.jsis.2013.01.002>
- van Rijnsoever, F. J. (2017). (I can't get no) saturation: A simulation and guidelines for sample sizes in qualitative research. *PLoS One*, 12(7), e0181689.
<https://doi.org/10.1371/journal.pone.0181689>
- von Meding, J., Wong, J., Kanjanabootra, S., & Taheri Tafti, M. (2016). Competence-based system development for post-disaster project management. *Disaster Prevention and Management*, 25(3), 375–394. <https://doi.org/10.1108/DPM-07-2015-0164>

- Windsong, E. (2018). Incorporating intersectionality into research design: An example using qualitative interviews. *International Journal of Social Research Methodology*, 21(2), 135–147. <https://doi.org/10.1080/13645579.2016.1268361>
- Wu, G., Qiang, G., Zuo, J., Zhao, X., & Chang, R. (2018). What are the key indicators of mega sustainable construction projects? —A stakeholder-network perspective. *Sustainability*, 10(8), 2939. <https://doi.org/10.3390/su10082939>
- Yang, L., & Huang, C. (2016). Information technology utilization to improve project team-owner relationship and project performance. *KSCE Journal of Civil Engineering*, 20(1), 48–57. <https://doi.org/10.1007/s12205-015-0147-0>
- Yin, R. (2018). *Case study research: Design and methods* (6th ed.). Sage.
- Zennaro, I., Finco, S., Battini, D., & Persona, A. (2019). Big size highly customized product manufacturing systems: A literature review and future research agenda. *International Journal of Production Research*, 57(15-16), 5362–5385. <https://doi.org/10.1080/00207543.2019.1582819>
- Zhang, W. M., & Tian, C. (2012). Brief analysis of human resource management in project management. In *Applied Mechanics and Materials* (Vol. 174, pp. 2840-2843). Trans Tech Publications Ltd. <https://doi.org/10.4028/www.scientific.net/AMM.174-177.2840>
- Zuofa, T., & Ochieng, E. G. (2017). Working separately but together: Appraising virtual project team challenges. *Team Performance Management: An International Journal*, 23(5–6), 227–242. <https://doi.org/10.1108/TPM-06-2016-0030>

Appendix A: Participant Recruitment Email/Letter Template

[Insert Date]

[Recipient]

[Title]

[Organization]

Dear [Recipient],

I am a graduate student at Liberty University who is conducting research on the effects of project managers use of human resource management tools and techniques within acquisition-mission oriented organizations of the United States Department of the Navy (DON). My research is a part of my requirement to complete a Doctor of Business Administration degree. The purpose of my research is to explore how project managers, within acquisition mission-oriented organizations of the DON, use human resource management (HRM) tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects.

As a [project manager, project team member, supervisory human resources specialist] of an acquisition mission-oriented organization of the DON, I am inquiring with you to ask you if you would be interested in participating in a semi-structured interview in support of my research. Given the current need to social distance ourselves, the interview will be conducted through a personal electronic device via video conferencing tool. The interview will consist of a series of open-ended questions and will last approximately 60 minutes.

I have attached a Participant Informed Consent form to this email that provides additional information about my research. After review of the consent form, if you are interested and willing to participate in this research please send an email to xxxxxxxx@liberty.edu with "Research Case Study" in the subject line. In your email, provide responses to the following questions, then print, sign, scan and attach a signed copy of the consent form to your email.

1. Within my organization, I have/have not worked on a project team from initiation to closure of a project.
2. Within my organization, I have/have not managed a project from initiation to closure.
3. Within my organization, I have/have not held a supervisory human resources specialist position for at least 12 months.

I will follow up with you in a few days in case you have any questions about this research, but if you have any immediate questions please do not hesitate to contact me via my personal cell phone (xxx) xxx-xxxx or through my email, xxxxxxxx@liberty.edu.

Thank you for your consideration of my invitation to participate in this research.

Respectfully,

Gregory A. Bouton

Appendix B: Participant Informed Consent Form Template

CONSENT FORM

Effects of Project Managers Use of Human Resource Management Tools and Techniques to Plan, Estimate, Acquire, Develop, Manage, and Control Project Teams Within Acquisition Mission-Oriented Organizations of the United States Department of the Navy

Gregory A. Bouton
Liberty University
School of Business

You are invited to participate in a research study of the effects of project managers use of human resource management (HRM) tools and techniques to plan, estimate, acquire, develop, manage, and control project teams within acquisition-mission oriented organizations of the United States Department of the Navy (DON). You were selected as a possible participant because you are a[n] [project manager, experienced project team member, supervisory human resources specialist] of an acquisition mission-oriented organization of the DON. Please read this form and ask any questions you may have before agreeing to be in the study.

Gregory A. Bouton, a doctoral candidate in the School of Business at Liberty University, is conducting this study.

Background Information: The purpose of my research is to explore how project managers, within acquisition mission-oriented organizations of the DON, use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects.

Procedures: If you agree with and consent to participating in this research, I ask that you participate in an approximately 60 minute semi-structured interview in order to answer a series of open ended questions pertaining to your experience as a[n] [project manager, experienced project team member, supervisory human resources specialist] of an acquisition mission-oriented organization of the DON. Given the current need to social distance ourselves, the interview will be conducted through a personal electronic device via video conferencing tool. As a participant in this research, you will be involved in the decision regarding the date and time the interview will be scheduled. An interview guide will be provided to you in advance of the interview in order to provide you with an opportunity to review the questions before the interview is conducted. The interview will be audio recorded via audio recording device in order to transcribe the context of the interview. A copy of the transcription of the interview will be provided to you so that you can review the transcript and make changes to your responses if you find necessary. Your approval of the resulting transcription must be rendered prior to being used in the research.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. Such risk may be physical in the form of interview fatigue, in which case I will offer interview participants an opportunity to take a break to rest their minds and gather their thoughts before proceeding with the interview. A potential psychological risk associated with this research could occur in the form of anxiety that is driven by thoughts of past

events that spur an interview participants response. To minimize the opportunity for such a psychological risk the interview questions have been carefully written to not spur personal opinions that are driven by emotions. To reduce the opportunity for social risks no personally identifiable information will be collected for analysis in this research. This strategy has been adopted in order to ensure the integrity of all interview participants' confidentiality is maintained. In order to avoid legal risks all interview participants will be asked not to provide any type of classified information in their responses.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study. The benefits of this research to society include an increase in the bodies of knowledge associated with understanding how project managers in general use HRM tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order complete projects.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. In any sort of report, I might publish, I will not include any information that will make it possible to identify a research subject. Only the researcher will have access to participant interview transcripts. Other research records will be stored securely, and only the researcher, the dissertation chair, the committee, and the administration will have access to the data. To protect interview participants, participants will be assigned a pseudonym. I will conduct the interviews in a location where others will not easily overhear the conversation. Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted. Interviews will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.

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

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

Contacts and Questions: The researcher conducting this study is Gregory A. Bouton. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact Gregory at (xxx) xxx-xxxx or xxxxxxxx@liberty.edu. You may also contact the researcher's faculty advisor, Dr. John Johnson at xxxxxxxx @liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record me as part of my participation in this study.

Signature of Participant Date

Signature of Researcher Date

Appendix C: Participant Interview Guide Template

Time of Interview:

Date of Interview:

Interviewer: Gregory A. Bouton

Interviewee:

Interview Type: Project Manager/Project Team Member/Supervisory Human Resource Specialist

Opening Statement: Thank you for participating in this research. Your willingness to support this case study aids in the exploration of how project managers, within acquisition mission-oriented organizations of the Department of the Navy (DON), use human resources management (HRM) tools and techniques to plan, estimate, acquire, develop, manage, and control project teams in order to complete projects. During this interview, please do not provide any responses to the interview questions that reflect classified, confidential, or personally identifiable information that could adversely affect the mission of you, your peers, leaders, subordinates and your DON acquisition mission-oriented organizations or any other federal or state agency of the United States of America.

Interview Questions:

1. Please briefly describe the key strategies project managers use to allocate and employ the HRM tools and techniques that enable project teams to complete project work within your organization.

- a. How are human resources (HR) practitioners employed by project managers to allocate the HRM tools and techniques that enable project resources management (PRM) functions?
- b. How are HR practitioners employed by project managers to estimate the HRM tools and techniques that are needed to support PRM functions?
- c. How are HR practitioners employed by project managers to acquire the human capital that is necessary to sustain project teams?
- d. How are project teams developed via HRM tools and techniques?
- e. How are project teams managed via HRM tools and techniques?
- f. How are project teams controlled via HRM tools and techniques?

2. Describe the observed level of competence displayed by each of the following stakeholders to allocate and employ the HRM tools and techniques that facilitate PRM processes at your organization.

- a. Project team member?
- b. Project manager?
- c. HR Practitioner?
- d. Executive level management?

3. Describe the level of effectiveness regarding how and why HRM tools and techniques are allocated and employed by project managers via HR practitioners during PRM processes to support project teams within your organization.

- a. How effective are project managers at allocating and employing HRM tools and techniques during PRM processes to support project teams?
- b. How do project managers affect the allocation and employment of HRM tools and techniques during PRM processes?
- c. Why do project managers affect the allocation and employment of HRM tools and techniques during PRM processes?
- d. How do project managers' level of effectiveness in allocating and employing HRM tools and techniques contribute to PRM process related problems?
- e. Why do project managers choose to allocate and employee HRM tools and techniques at a particular level of effectiveness during PRM processes?

4. Describe the impact caused by ineffective allocation and employment of HRM tools and techniques within your organization?

- a. On project completion rates?
- b. On project team member satisfaction rates?
- c. On project manager and HR practitioner cohesion?

5. Describe how the level of commitment from each of the following stakeholders influence the allocation and employment of HRM tools and techniques that facilitate PRM processes at your organization.

- a. Project team member?
- b. Project manager?
- c. HR Practitioner?
- d. Executive level management?

6. Is there anything else that you would like to add?

Closing Statement: Thank you again for participating in this research. Please rest assured that your responses to the aforementioned research questions will remain confidential. After the interview is transcribed, I will provide you with a copy of your interview transcript for your review and approval to use in this research.