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Toward Excellence: A Study of Public Sector Department of Defense Teams

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Walden University

College of Social and Behavioral Sciences

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Denise M. Miller

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Abstract

Toward Excellence: A Study of Public Sector Department of Defense Teams

by

Denise M. Miller

MA, University of Maryland University College, 2003 BA, University of Maryland University College, 2000

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Public Policy and Administration

Walden University
2016

Abstract

The Department of Defense's (DoD's) budgetary and personnel challenges are affecting readiness, thus encouraging the use of effective teams to improve efficiency. This qualitative, descriptive case study examined how public sector DoD members experienced characteristics of high-performing teams (HPTs), defined by their members' shared sense of purpose, interdependent commitment, and exceptional team effectiveness. The documentation of these experiences may aid other DoD teams seeking to improve performance. Lewin and Sherif's theories on group dynamics, Johnson and Johnson's theory on groups, Katzenbach and Smith's theory of HPTs, and Edmondson's work on teams comprised the theoretical framework. Thirty-nine public sector DoD members provided responses to semistructured questions that were developed to seek insights into DoD members' team experiences and practices. Data were analyzed and categorized based on codes derived from the literature. Emergent themes from participant responses confirmed that public sector DoD team members experienced some characteristics of HPTs. Study participants perceived that these teams made positive organizational impacts, but transferring knowledge about these teams' best practices was inconsistent. These findings may contribute to positive social change by improving awareness among DoD practitioners about related HPT benefits and practices; informing public policy makers and practitioners about the value of HPTs in increasing financial and operational efficiencies; improving managerial quality and team experiences; encouraging innovation, openness, and action; and fostering an high-quality DoD workforce exemplifying long-term commitment to excellence and continuous improvement.

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Dedication

To Department of Defense team members striving to make a difference, especially those quiet professionals who daily exemplify excellence and selfless sacrifice.

Acknowledgments

This project would never have been conceived were it not for the excellent teams of which I have been a member. I gratefully thank the DoD members who participated in this study and those who supported its pursuit¹. I also thank the teams who achieved unprecedented heights and those who never gave up hope that they one day might; their members' commitment to excellence inspires and humbles me to this day.

Any success in my life is owed to a vast support network of family, friends, schoolmates, coworkers, and mentors. Thank you to Alex and Mele for their endless constancy; Mum and Dad for their boundless belief in their offspring; my dear friend and dissertation buddy, truly the world's best builder of boats; my coworkers for their patient forbearance of my continual academic and procedural updates; and to the many family, friends, mentors, leaders, and colleagues who encouraged me onward toward excellence.

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It is with deep appreciation I humbly offer this small token of evidence as but a partial return on your collective investment in me.

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¹ All statements of analysis or opinion are those of the author and interviewees and do not reflect the official policy or position of the Department of Defense or any of its components, or the U.S. Government.

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Chapter 1: Introduction to the Study

Introduction

Trust in the United States (U.S.) public sector is at an historic low, due in part to perceptions of poor performance and unnecessary expenditures (Steinhauser, 2014). More than 20 years ago, President Bill Clinton enacted the Government Results and Performance Act to encourage performance measurement and output improvement among Federal agencies (Office of Management and Budget, 2013). The United States federal government highlights its commitment to effective performance through the articulation of prioritized high-performance goals, such as via the Office of Management and Budget's (OMB) Budget Analytical Perspectives (OMB, 2013). The cumulative effects of achieving such high-performance goals are organizational excellence and efficiency in the public sector—a potential contributor to improved citizen and public confidence in government and effective fiscal responsibility (OMB, 2013).

High-performance organizations may consist of several high-performing teams (HPTs) contributing to the organization's overall superior performance when compared to similar organizations (de Waal, 2010). HPTs (Katzenbach & Smith, 2006), self-directed teams (Ray & Bronstein, 1995), and autonomous groups (Johnson & Johnson, 2013) can yield fiscal, operational, and innovative advantages and a discernable competitive advantage that distinguish them from other teams (de Waal, 2010; Edmondson, 2012; Johnson & Johnson, 2013; Ray & Bronstein, 1995). Cultivating HPTs can be challenging to an organization because HPTs are difficult to identify; their many fluid components constitute a unique blend of people, purpose, commitment, and

output (de Waal, 2008; Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 2006).

A formulaic approach to constructing HPTs is not possible (Bush, Abbot, Glover, Goodall, & Smith, 2012). The presence of several elements, such as a focus on shared values and a common purpose, role clarity, a long-term approach, stable team membership, and professional development can assist when developing these teams (Bush, Abbot, Glover, Goodall, & Smith, 2012; Katzenbach & Smith, 2006). Difficulties may arise when managers attempt to transfer an HPT's winning characteristics to other organizational teams (Edmondson, 2011b; Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 2006). Case studies may facilitate identification of these traits, however, and offer examples that can be contextualized for use by others seeking similar outcomes (Bush, Abbot, Glover, Goodall, & Smith, 2012).

The U.S. Department of Defense (DoD) is facing significant fiscal and personnel reductions amid expanding requirements and missions (Hagel, 2013; Sisk, 2015). The efficiencies and innovative solutions frequently credited to successful private sector HPTs (Katzenbach & Smith, 2006) may offer remedy to the fiscal and personnel challenges the DoD is facing. In their study of the convergence of team theory and practice, Tannenbaum, Mathieu, Salas, and Cohen (2012) suggested a need for further research to examine how organizations' leaders encourage teams to become self-directed or autonomous during times of organizational economic difficulties. The authors' suggestion aligned with the goal of this study to examine how DoD team members experienced working in office-based teams, whether these teams exhibited characteristics

of HPTs, whether these experiences contributed to increased organizational effectiveness or efficiencies, and whether these teams influenced others in their organizations to adopt HPT best practices.

Characteristics of public and private sector organizational processes and teaming practices, when two or more people work together to achieve a goal (Edmondson, 2012), frequently are differentiated by a perception of diminished public sector team performance relative to that of the private sector (Steinhauser, 2014). Each sector, however, has strengths from which the other can learn (Nartisa, Putans, & Muravska, 2012); this suggests that HPT practices may be found in both sectors (de Waal, 2011; Katzenbach & Smith, 2006). I examined public sector DoD team members' experiences to determine how they experienced characteristics of group dynamics and how, if present, attributes of HPTs emerged in practice.

The findings may contribute to furthering the dialog between practitioners and scholars while yielding insights that may be applied to other public sector DoD teaming practices. Sharing these insights may help to improve efficiencies and contribute to remedying DoD fiscal and personnel constraints (Dull, 2010; Pellerin, 2015). Sharing effective practices may also contribute to team members' overall well-being due to the positive levels of commitment and esteem enjoyed by many HPT members (Katzenbach & Smith, 2006).

In this chapter, a summary of the background of this study and description of an opportunity to contribute to the literature on public sector team performance are offered. The research problem; the purpose of this qualitative, descriptive case study; the

theoretical framework; operational definitions; assumptions and limitations; and the significance of the study are also described. This chapter concludes with a preview of the remaining chapters of the study.

Background

HPTs are characterized by their ability to exceed organizational output expectations (Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 1993, 2006). Although numerous definitions exist for HPTs and their associated characteristics, I sought to examine public sector DoD team members' experiences within the context of Katzenbach and Smith's (1993) seminal definition: An HPT is "a small number of people with complementary skills...who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable" (p. 112). The authors later expanded this definition to include an important aspect of HPTs: they are "deeply committed to one another's personal growth and success" (Katzenbach & Smith, 2006, p. 92). HPTs seemingly achieve more with less (Johnson & Johnson, 2013; Katzenbach & Smith, 1993), a frequent request made by senior public sector officials and taxpayers who hold expectations of high-performance as a means to gain efficiencies with scarce taxpayer monies (Gates, 2010; Hagel, 2013; Pellerin, 2015; Sisk, 2015).

Annual U.S. federal government high-performance goals typically are categorized by organization (OMB, 2013). An organization in its entirety, however, does not represent a large team (Katzenbach & Smith, 1993). This suggests that high-performance in a large government organization, such as the DoD, would be achieved through

numerous smaller teams with refined, localized goals and which contribute collectively to the broader shared goal of effective national security. As presented in Chapter 2, many studies in the literature focused on team performance. Few, however, focused on DoD team member perspectives about their experiences outside a deployed or combat environment. This study may partially address this literature gap through the examination of the members' experiences in nondeployed, office-based teams. This study also yielded findings that may be of interest to public sector DoD members who wish to adopt effective teaming practices in pursuit of broader high-performance goals aligned with federal government expectations (OMB, 2013) and in keeping with exemplary stewardship of finite, public funds.

Problem Statement

Mandatory, sequestration-associated budget cuts are contributing to unprecedented efficiency challenges in the DoD, affecting personnel and military readiness (Hagel, 2013; Pellerin, 2015) and encouraging the use of effective teaming practices to gain fiscal and operational efficiencies. The practice of implementing operational and financial efficiencies in government processes is long established (OMB, 2013). High-performing DoD and public sector teams may serve as examples and offer best practices for other DoD teams to adopt (Katzenbach & Smith, 1993). Recent focus on reducing the costs and size of public sector operations (Hagel, 2013) suggested an opportunity to examine DoD team practices and performance.

The practical application of HPT characteristics also may address, in part, calls for improving public sector output by achieving high-performance goals, a common

component of public policy discourse (OMB, 2013). HPTs can enable organizations to achieve and even surpass challenging goals, reduce costly managerial oversight, and identify new products and processes while innovating solutions for problems or opportunities left unidentified by hierarchical managerial approaches (de Waal, 2008, 2010; Katzenbach & Smith, 1993). Such achievements can yield cost savings that may address fiscal and personnel shortfalls (de Waal, 2008).

Many examples of private sector HPTs are available in the literature. Restricted access to DoD personnel, however, generally limits examination of how these public sector personnel experience the characteristics of high-performing teaming in their organizations, particularly in an office-based context. Sequestration and recurrent failures to pass a budget on time (Hagel, 2013; Pellerin, 2015; Sisk, 2015) could have affected DoD employees' approaches to teaming. The findings of this study, however, suggest that DoD teams prioritize mission requirements and forge ahead with resilience despite reduced resources though the endless sustainability of such tenacity is unlikely.

This examination of DoD members' teaming experiences may partially answer DoD decision makers' calls for a smaller workforce to achieve greater results with fewer resources (Carter, 2013; Gates, 2010; Hagel, 2013). Effective use of such teams also may improve measurement of effective public sector performance (OMB, 2013), a key factor in promoting trust among citizens (Piotrowski & Ansah, 2010). Personnel reductions of active duty military members, which comprise the backbone of DoD organizations (Alexander & Shalal, 2014; Sisk, 2015), and the DoD civilian employees' 2013 loss of between six (Vogel & Hicks, 2013) and 22 workdays (Burwell, 2013) were not found

specifically to have affected teaming practices among participants of this study. Well-resourced teams, however, were perceived more successful than those with insufficient manpower, as described by study participants and presented in Chapter 4 of this study.

Purpose of the Study

The purpose of this qualitative, descriptive case study was to examine how public sector DoD team members experience working in teams and whether those experiences exhibited characteristics associated with HPTs (Katzenbach & Smith, 1993, 2006). I also sought to examine how HPT practices in public sector DoD teams could yield aboveaverage effectiveness or efficiency as measured by organizational or team member perception. Responses derived from semistructured interview questions (IQs, Appendix C) answered by DoD members with experiences working on office-based (nondeployed, noncombat) teams formed the primary data under examination. Following approval of the proposed study by both the Walden University Internal Review Board (IRB) and a DoD IRB, study participants were identified through professional or other associations among known DoD members and drawn from members of the U.S. Army, Marine Corps, Navy, and Air Force as well as civilian DoD members. Members of the U.S. Coast Guard were not sought because they are assigned to the Department of Homeland Security. The DoD IRB approval implied neither DoD sponsorship for this study nor support for its findings. All participants responded after work, during nonduty hours to ensure that participants were neither given a false impression of any obligation to participate in this study nor that DoD or its organizations directed or sponsored this study.

The collected data informed the examination of successful and unsuccessful teaming experiences; the extent of the team members' awareness of HPT practices; whether characteristics of their HPT experiences aligned with the literature; how team members measured team output; and whether effective HPT experiences were transferred to other organizational teams. Shared themes from the study's findings might inform other public sector DoD teams' recognition of and experiences with teams exhibiting HPT characteristics, such as a shared sense of mission, approaches to satisfying goals and objectives, and organizational practices, all of which are largely consistent across DoD organizations. The findings may also contribute to a discussion on best practices of DoD high-performing, office-based teams.

RQs

I sought to answer the following research questions (RQs) in this qualitative, descriptive case study:

- To what extent do public sector DoD members experience HPTs in their organization(s)?
- 2. How do public sector DoD team members experience characteristics of HPTs in their organization(s)?
- 3. To what degree do public sector DoD team members believe HPT characteristics contribute to their organization's performance?
- 4. To what degree do high-performing public sector DoD team members perceive they influence others within their organization to adopt high-performing teaming characteristics?

Demographic Questions

I sought a broad sample of participants and employed the following demographic questions (Appendix C):

- 1. Are/were you Enlisted, Officer, Civilian?
- 2. How many years did you serve?
- 3. Which branch of service(s)?

Interview Questions

Interview questions (IQs, Appendix C) were informed by the literature review and aligned with the RQs (Appendix B). Identifying HPT characteristics was purposefully delayed until the last formal semistructured question (Question 7) to determine whether participants, without prompting, would identify these characteristics among their responses to IQs 1-6.

- 1. Please describe an experience as a member of a DoD team in a nondeployed, office environment when the team exceeded its goals. What made this team successful?
- 2. Please describe an experience as a member of a DoD team in a nondeployed, office environment when the team did not meet its goals. What contributed to this team's inability to meet its goals?
- 3. Please describe the types and availability of resources given to your team when it exceeded its goals.
 - 3a. How did this differ from when your team did not meet its goals?
- 4. How did your most successful team contribute to your organization's goals?

- 5. How did team members interact with one another when your team was most successful in meeting its goals?
- 6. Please describe how this team helped other teams to adopt successful team practices.
- 7. HPTs are comprised of members who share a sense of purpose, possess complementary skills, are committed to one another, and exceed organizational goals. How do these characteristics describe any of your DoD team experiences?
- 8. Is there anything I have not asked about your experiences as a DoD team member that you would like to share to help inform the findings of this study?

Theoretical Framework

A researcher identifies a theoretical framework to provide structure to the case study's foundation in the literature (Yin, 2003). The researcher identifies categories of theories, experiences, and the study's goals to construct the framework (Miles, Huberman, & Saldaña, 2014). The framework of this study was based on group dynamics (Lewin, 1944b), group theory (Johnson & Johnson, 2013), and teaming (Edmondson, 2012). Additional information about the framework is presented in Chapter 2 of this study. Heavy reliance upon a sub-set of teaming theory, the characteristics of HPTs (Katzenbach & Smith, 1993), was also foundational to the development of this study's theoretical framework and related RQs.

To better understand the underlying facets contributing to HPTs, I examined concepts related to group and team theory, such as *team cohesion*, *team composition*,

Johnson, 2013; Maynard, Mathieu, Gilson, O'Boyle, Jr., & Cigularov, 2013; Tuuli & Rowlinson, 2009). Challenges and opportunities of public sector teaming experiences, particularly those occurring in the DoD, and the expectations of effective public administration (OMB, 2013) were also identified. Lastly, the framework was informed by a brief review of organization theory, leadership theory, and motivation theory due to the collective, practical effects of these theories on group outcomes (Johnson & Johnson, 2013; Shafritz, Ott, & Jang, 2011). The theoretical framework is portrayed in Figure 1.

I sought to examine DoD team members' experiences and, as described in Chapter 4 of this study, to determine whether opportunity existed to transfer best practices to other public sector DoD teams due to the shared overall organizational processes and practices experienced by DoD members, regardless of their duty location or subordinated organization. A review of group dynamics (Lewin, 1944b), group theory (Johnson & Johnson, 2013), teaming (Edmondson, 2012), Katzenbach and Smith's (2006) definition of high-performing teaming, and the associated theories described above informed my understanding of effective team performance, team member motivations and competencies, team evolution and interpersonal dynamics, and potential challenges facing current team members. Synthesis of this research led to development of the aforementioned RQs and informed the semistructured IQs used in the data collection instrument (Appendix C) and subsequent data analysis codes (Appendix E). In Chapter 2, a more detailed analysis of the literature that informed the theoretical framework, development of the RQs, and crafting of related IQs is presented.

Nature of the Study

Following a review of Yin's (2009; 2014) descriptions of the types of qualitative studies, a qualitative, descriptive case study was determined appropriate for this examination of public sector DoD team members because descriptive case studies support in-depth examination of a contemporary event (Yin, 2014). A qualitative, descriptive case study also afforded a unique opportunity to document DoD members' insights in their own voices, adding a richness and robustness to understanding how these professionals field challenges associated with resource constraints and basic teaming practices. Chapter 3 contains a fuller description of other methodologies considered.

United States DoD military or civilian personnel with experience working on teams in an office-based environment (as opposed to a deployed environment) formed the population from which this study's sample was drawn. Study candidates could be active or former DoD personnel who served in the United States Army, Marine Corps, Navy, or Air Force or who worked as a DoD civilian federal employee. Although thousands of personnel would have qualified to participate in this study, restrictions from using DoD systems or bases to solicit study candidates necessitated a network approach whereby known associates who qualified for the population parameters were approached for potential participation. A list of 54 potential study candidates remained after excluding any candidates with whom a direct supervisory relationship was present; this ensured the absence of undue pressure or potential for other negative influence.

As further described in Chapter 4, I contacted candidates and requested any recommendations for others who may meet the participant criteria described earlier. The

list grew to 68 candidates based on these snowballing suggestions. None of the additional 14 recommendations were rejected; all met the study's participation criteria. Thirty-nine people with DoD office-based team experience elected to participate. The final sample included officer and enlisted members from among all four services and DoD, federal civilians. Study participants represented a range of experiences as described further in Appendix D.

The primary data collection instrument was comprised of semistructured IQs answered by DoD team members. Yin (2014) encouraged employing individual interviews until reaching saturation, at which time responses no longer offered unique information. Semistructured questions were deemed appropriate as this study's primary collection method because the questions afforded in-depth consideration of the team members' experiences (Merriam, 2009; Yin, 2014). Virtual, written semistructured interview questions were made available to accommodate participants' temporal and geographic differences. The use of virtual questions allowed for accommodation of individual participants who were unable to interview face-to-face or over the phone due to geographic separation or personal preference. This approach also ensured precise capture of responses for coding and quotations because the participant provided inputs in his or her own words. Follow-up interviews were requested and held where possible; transcripts were confirmed correct as described in Chapter 3.

HPTs typically are small in team member size (de Waal, 2005; Johnson & Johnson, 2013; Katzenbach & Smith, 1993). It was impossible to interview all members of an intact DoD team for a number of reasons, including transient team members who

were unavailable or whose whereabouts were unknown, partial reliance upon snowball sampling, and restrictions for participants to participate only after work hours.

Nevertheless, the sample size (39) and availability of participants representing multiple team experiences allowed comparative saturation (Yin, 2014).

The inability to interview all DoD members of a single, intact team thus yielded only fragmented information representative of an individual team member's perspective. Several authors wrote, however, that there is still merit in examining these team members' perspectives given their unique experiences (Mathieu, Tannenbaum, Donsbach, & Alliger, 2014; Tannenbaum, Mathieu, Salas, & Cohen, 2012). As described in Chapter 4, questions for the semistructured interview method and subsequent derivative coding of the findings were based on themes discovered during a review of literature describing the theoretical foundations of characteristics of group dynamics, team performance, and HPTs.

Collected data were first manually coded on paper then coded again by using NVivo qualitative software to validate initial identification of themes and categories (Bazeley & Jackson, 2013). Multiple queries were made and data were cross-referenced manually, using NVivo, and also by developing an Excel spreadsheet to ensure correct aggregation and synthesis of all data, particularly when it deviated from the literature or other participants' reported experiences. The findings were compared for triangulation of the results (Yin, 2014).

Despite the difficulties of generalizability among cases, examples of shared emergent themes from different case studies across many generations exist (Yin, 2014).

This suggests that a potential also exists for transference of the participants' identified best practices to other DoD teams who share similar organizational constructs and dynamics. I sought to identify insights into experiences either shared by the participants or sufficiently consistent across disparate experiences to yield themes that may also offer an opportunity for other public sector DoD teams to learn and apply best practices.

Additional details about the nature of this are study offered in Chapter 3. Additional recommendations on themes of potential interest to practitioners are offered in Chapter 5.

Operational Definitions

The following terms and phrases are used throughout this study.

Big Five personality traits. Five predominant personality traits—conscientiousness, extraversion, agreeableness, openness to experience, and neuroticism—yield insights into anticipated individual behavior and dyadic or group interactions (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011; Fiske, 1949, as cited in LePine, Buckman, Crawford, & Methot, 2011, p. 312).

Coalition. A group of individuals who interact frequently but whose measured strength is not known to in-group or out-group members; the group's formation is deliberate and operates outside a formal structure but is focused collectively on an agreed upon goal necessitating the group members' determination to fulfill the goal and benefit the group's member(s) (Meyer, 2013, p. 125); e.g. a *coalition* of the willing.

Conflict. The effect of team member discord or dissimilarity; identified further as relationship, task, or process conflicts (de Wit, Greer, & Jehn, 2012).

High-Performance Organizations. Organizations that achieve a comparative advantage by outperforming other organizations that share the same or similar output goals or metrics (de Waal, 2010).

HPTs. "[A] small number of people with complementary skills...who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable (Katzenbach & Smith, 1993, p. 112). . . [and] who are deeply committed to one another's personal growth and success" (Katzenbach & Smith, 2006, p. 92).

Kinetic actions or operations. Of, or pertaining to actions or operations using direct force, such as a bombing or a shooting, that yield a physical effect on an intended target; results may be lethal or non-lethal (United States & Curtis E. LeMay Center for Doctrine Development and Education, 2013, p. 52).

Knowledge transfer. The sharing of information and expertise between people or teammates (Joy & Haynes, 2011).

Leader-member exchange. The practice of a leader contextualizing his or her exchanges with members/followers (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011). Leaders may affect leader-member exchange more strongly than followers; the quality of LMX outcomes is often determined by how a leader employs rewards, leadership style, or the leader's assessment of how successful a follower can be (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011).

New Public Management. Public sector management processes which encourage the public sector to adopt private sector organizational and operational processes, such as

the use of performance management metrics, improved worker accountability, and minimization of bureaucratic practices (Patrick & French, 2011, pp. 340-341).

Nonkinetic actions or operations. Of, or pertaining to actions or operations that affect an intended target without the use of direct, physical force; results may be lethal or non-lethal (United States & Curtis E. LeMay Center for Doctrine Development and Education, 2013, p. 52).

Ongoing teams. Teams who continue working together over long periods to reach a goal and who anticipate a potential need or opportunity to work together again (DeJong & Elfring, 2010).

Organization theory. The basis for scrutinizing how organizations function and change based on the actions of the people comprising the organization (Shafritz, Ott, & Jang, 2011). Others wrote that organization theory does not exist as a single entity, but requires many theories to examine and explain the contextualized experiences of an organization's employees and of the organization's life cycle (Shafritz, Ott, & Jang, 2011).

Relationship. A link or association among people that is neither limited by context nor the longevity of the contact (Humphrey & Aime, 2014).

Self-directed/self-managed team. Largely autonomous teams responsible for their own task and goal achievement (Yang & Guy, 2011). Self-managing behaviors are related positively to team effectiveness as measured by performance, longevity, and efficiency (Rousseau & Aubé, 2010), even among public sector teams.

Social exchange theory. The relative power of individuals determines how interactions will progress with limited mediating opportunities to remedy the power disparity among more and less powerful individuals (Emerson 1976).

Team. At least two people who share a goal or objective, depend upon one another, have different but connected duties or tasks, and share an organizational context (Kozlowski & Ilgen, 2006).

Team absorptive capacity. A team's capacity to inculcate new knowledge; a possible predictor of team performance (Zhang, Venkatesh, & Brown, 2011).

Team composition. The distinguishing characteristics of a team determined by its members' traits, expertise, or the team's collective ability to meet goals and objectives (Mathieu, Tannenbaum, Donsbach, & Alliger, 2014). Dimensions of expertise may include task-specific knowledge, contextual knowledge, technical knowledge, or an understanding of how information travels between organizational or industry experts (Garrett, Caldwell, Harris, & Gonzalez, 2009).

Team cohesion. The degree to which a team's members share the same links to others within a group (Wise, 2014).

Team effectiveness. How well a team is able to achieve its own, organizational, or other pre-established goals (Johnson & Johnson, 2013; Rosen et al., 2010). Team effectiveness is assessed by work outcomes, cohesiveness, and outcome satisfaction (Lira, Ripoll, Peiro, & Gonzalez, 2007).

Team efficacy. A team's collective belief in its ability to work together to complete a task or tasks (Collin & Parker, 2010).

Teaming. The act of two or more individuals working together to achieve a goal even in the absence of formalized structures, organizational support, or resource allocation. (Edmondson, 2012).

Team mental model. A team's members' shared interpretation and understanding of the team's situation (Mohammed, Ferzandi, & Hamilton, 2010).

Team performance. The measurement of how well a team met its intended goals; also informs assessment of team effectiveness (Aubé and Rousseau, 2011).

Team potency. A team's collective belief in its abilities (Hu & Liden, 2011).

Theater. A geographic region in which military operations occur (Cambridge online English dictionary and thesaurus, n.d.).

Assumptions

For the purpose of this study, several assumptions were made, such as the assumption that public sector DoD teams could achieve the characteristics and output traditionally ascribed to private sector HPTs (de Waal, 2008; Johnson & Johnson, 2013; Katzenbach & Smith, 1993). DoD team members were also assumed to be able to describe their team experiences sufficiently to determine whether the characteristics of these teaming experiences aligned with the literature describing HPTs (Katzenbach & Smith, 1993; 2006). DoD team members were assumed to be members of crossfunctional teams, characterized as comprised of members from across numerous organizational offices (Daspit, Tillman, Boyd, & Mckee, 2013) and often employed in knowledge-based work environments (Aime, Humphrey, Derue, & Paul, 2014), such as office settings. I assumed teams shared knowledge about and employed practices

exhibiting the characteristics of HPTs, even across teams comprised of a transient workforce like that of the DoD. Participants were also assumed to be honest in their responses based on their experiences. Participant observations also were assumed to form a collective, accurate, and current narrative of DoD team member experiences in an office (nondeployed, noncombat) environment.

Yin (2014) suggested that transferability between cases is not possible due to the uniqueness of each case. Some studies, however, have relied successfully upon case studies to identify exemplars from which comparisons could be made (Leach & Mayo, 2013; McAlearney, Garman, Song, McHugh, Robbins, & Harrison, 2011). Volunteer participants in this case study were assumed to be typical DoD members who have both positive and negative experiences working in DoD teams. The relatively shared opportunities and constraints experienced by many public sector DoD teams were assumed to yield distinct prospects for applying best practices. Some aspects of identified best practices may be shared with other DoD teams who possess a similar mission, purpose, or overall aligned outcome (e.g. national security, national defense). Lastly, the representative sample was assumed to offer important insights from which researchers and practitioners could learn.

These assumptions collectively contributed to the goal of this study to examine the presence and nature of HPTs among DoD team members working in an office environment. It was important to assume that participant answers accurately reflected experiences so that triangulation (Yin, 2014) could occur. These assumptions also contributed significantly to a foundational understanding of how these teams' experiences

aligned with or diverged from the literature, such that recommendations for practitioners would be based upon rigorous consideration of earlier findings, contextualized for practical dynamics.

Scope and Delimitations

The scope of this qualitative, descriptive case study was restricted to relatively small numbers of public sector DoD team members who represented multiple teams instead of an holistic analysis of one team. This focus was selected to answer the earlier identified RQs and to align with the most appropriate methodology: a descriptive case study examining a contemporary issue (Yin, 2014). The DoD participant sample in this study experienced variance among the length and periodicity of their teaming experiences. The purpose of this study, however, was to examine the experiences of each team member. Examination of the collected data afforded an opportunity to compare team member experiences and identify opportunities for transferring lessons learned.

I relied upon sampling practices as the core delimitation of this study. I did not purposely seek out candidates from specific functional areas, such as finance, logistics, or human resources, which may have altered the overall results. I instead sought participants from among members from all branches of the U.S. Armed Forces and DoD civilians. I sought participants with a variety of experience levels (Appendix D) and from different offices to examine a diverse sample.

Qualitative samples are typically small (less than 20), according to Yin (2014). The sample of this case study did not include a specific number at numerous sites (i.e. two participants at ten sites) as is common among case studies (Yin, 2014). The goal of

obtaining unique perspectives reflecting perceptions of DoD members' experiences, however, supported the participant pool and ultimate sample size which included 39 participants from multiple organizations dispersed across 12 time zones.

All findings identified during a case study are not fully transferable among teams given the uniqueness of the experiences (Yin, 2014). Typically, the distinctiveness of a team's experiences precludes sharing of best practices among other teams, placing a limit on the utility of a study such as this one. This may partially have been addressed by the sample's restricted inclusion of only DoD members, however, because the DoD shares an overarching culture, organizational context and processes, and rules. Practitioners may thus be able to draw from this study's findings to apply best practices to similar team dynamics experienced elsewhere in the DoD.

Limitations

The study was limited by the identification and availability of accessible and distinct public sector DoD team members willing to share information about their experiences. The sample may also have introduced unintended biases due to the network approach to sampling. This study was further limited by reliance upon study participants to self-report.

To address these limitations, purposive sampling of organizational associates who possessed the requisite study participant criteria was used. Study participants provided recommendations for snowballing of additional candidates. No participant's ultimate decision to participate was shared with anyone else, including any earlier participant who recommended soliciting the snowball participant's inputs. This approach may have,

however, introduced bias by limiting the inclusion of additional unique perspectives from outside participant social and professional networks. Recommendations for overcoming this potential bias in future studies are offered in Chapter 5.

Any candidate who possessed a supervisory/rating relationship with the researcher was excluded to ensure that no undue influence or other pressures emerged. A pilot study was conducted; pilot and field study participants reviewed contributions for accuracy, which reduced the potential for misinterpretation of the data. Study participant recollections were difficult to validate due to their unique experiences and the organizational context(s) of the experiences. This dynamic inadvertently may have introduced bias through self-reported responses. As presented in Chapter 4, however, the details offered in the responses suggested that study participants endeavored to provide an accurate description of their experiences, thereby reducing recollection (recency) bias.

Significance of the Study

Public sector efficiency has long been encouraged (OMB, 2013; Shafritz & Hyde, 2012). Public sector officials are expected to achieve fiscal optimization of scarce public funds (OMB, 2013). Recent budget constraints, however, emphasized the criticality of achieving efficiencies as quickly as possible (Hagel, 2013).

High-performance teaming has been found to improve a team's efficiency and effectiveness (de Waal, 2010; Johnson & Johnson, 2013; Katzenbach & Smith, 1993, 2006). As described in Chapter 4, this qualitative, descriptive case study yielded a number of insights into how public sector DoD team members experienced teaming; how these experiences informed subsequent teaming approaches; and how team best practices

were shared at a time of concurrent dwindling resources (Carter, 2013; Hagel, 2013), increased expectations to improve efficiency (OMB, 2013), and lingering citizenry discontent with perceived bloated costs of governance (Stipicevic, 2013). Identifying how public sector DoD team members employ HPT practices may contribute to positive social change by encouraging DoD practitioners to pursue further use of these efficient practices among other teams under their direction. Broader managerial awareness of how to encourage high-performance teaming may yield fiscal and operational benefits; sharing of best practices among other public sector teams may further reduce expenses while renewing public confidence in government.

Summary

In this chapter a presentation of the problem, that of how DoD members' experiences in HPTs may positively address ongoing DoD fiscal and personnel reductions, was offered. The background and purpose of the study were discussed. The alignment between the examination of the existing literature and this study's RQs was described as was the chain linking literature, RQs, and applicability to public sector team experiences. The rationale for choosing a qualitative, descriptive case study was offered, as were definitions of unfamiliar terms and a description of the limitations of the study. Lastly, the significance of the study was described: to learn from public sector DoD team members' experiences and examine the potential use of those teams' best practices by other public sector DoD teams.

In Chapter 2, a review of the literature related to teaming, particularly highperformance teaming and HPTs is presented. Core theoretical concepts are reviewed to discern how leadership theory, motivation theory, organization theory, and other related theories intersect in their effect on teams. The Chapter 2 Summary contains commentary on the principle points of interest in the literature review, gaps in the understanding of how these theories inform public sector teaming experiences, and opportunities to contribute to further examination of public sector team dynamics.

In Chapter 3, a greater description of the research methodology and rationale for employing a qualitative, descriptive case study are offered. Descriptions of the data analysis plan, identification of issues of trustworthiness, and explanation of the role of the researcher is also presented. Lastly, recruitment, participation, and data collection procedures are described, as are the processes and steps taken to ensure the study was conducted employing the highest possible ethical standards.

Chapter 4 contains the findings of this study. The chapter includes a description of how the findings addressed the RQs, in whole or in part. Themes and categories of findings that emerged from coding and analysis of participant responses are also identified. Descriptions of the procedures employed to ensure reliability and validity, in accordance with qualitative methodology standards, are also offered.

Finally, interpretations of the findings are presented in Chapter 5.

Recommendations for practitioners and future research are proposed. The chapter also contains a description of this study's potential contribution to positive social change based on the study's findings.

Chapter 2: Literature Review

Introduction

New public management principles have informed expectations of public sector output for more than 2 decades (OMB, 2013). Associated performance measurement ideals have not, however, significantly inspired citizen confidence that the public sector routinely provides exceptional service and value (Fryer, Antony, & Ogden, 2009; "New low in approval," 2014; Steinhauser, 2014; Walker, Boyne, Brewer, & Avellaneda, 2011). Public sector teams frequently score lower than private sector counterparts on high-performing organization factors and often are viewed as overly constrictive in rules and regulations (Brewer & Walker, 2009; de Waal, 2010; Johnson & Johnson, 2013; Katzenbach & Smith, 2006). This reality frequently is at odds with characteristics and expectations of the exceptional output associated with HPTs (Brewer & Walker, 2009; de Waal, 2010; Johnson & Johnson, 2013; Katzenbach & Smith, 2006).

DoD teams involved in kinetic, combat military operations, particularly Special Forces teams, often are lauded for exceeding operational goals (Ambrose, 2001). Recent budget cuts, force reductions, and decreased readiness spending (Hagel, 2013), however, are raising questions about overall military effectiveness (Chumley, 2013). Despite the difficulties of measuring public sector performance (Gabris & Nelson, 2013), this study presented an opportunity to examine how public sector DoD teams optimized their output via shared mission focus and the use of best teaming practices. Recipients of public goods may benefit from such output (Walker, 2005), even as the military is called upon

to adapt to persistent organizational change and increasing mission requirements due to shifting geopolitical dynamics (Carter, 2013; Hagel, 2013; Pellerin, 2015; Sisk, 2015).

In this qualitative, descriptive case study, I sought to examine how public sector DoD team members experienced effective, high-performance teaming and what these experiences could teach other public sector practitioners in their efforts to improve output. My literature review was based on the following RQs:

- 1. To what extent do public sector DoD members experience high-performing teams in their organization(s)?
- 2. How do public sector DoD team members experience characteristics of highperforming teams in their organization(s)?
- 3. To what degree do public sector DoD team members believe high-performing team characteristics contribute to their organization's performance?
- 4. To what degree do high-performing public sector DoD team members perceive they influence others within their organization to adopt high-performing teaming characteristics?

In this chapter, I review the literature central to understanding effective teaming, giving close attention to the definition of a *team* (Johnson & Johnson, 2013) and the process of teaming (Edmondson, 2012). I examine theories that may explain a team's formation and function, such as leadership theory, motivation theory, and organization theory. I identify the distinctions between an HPT, as defined by Katzenbach and Smith (2006), and a traditional work team or task force, as defined by Johnson and Johnson (2013). Examples of the types of efficiencies that can be gained from HPTs are offered

as well as examples of public sector teams that qualify as HPTs, according to Katzenbach and Smith's (2006) definition. Lastly, I discuss the potential for sharing identified HPT characteristics and practices among public sector teams.

Literature Search Strategy

I approached the literature review for this qualitative, descriptive case study by first consulting the Thoreau database and then EBSCO to gain a broad understanding of peer-reviewed article availability. I continued refining my searches using Google Scholar, which is linked to Walden University's online library, and using several databases, including ABI/INFORM Complete, Academic Search Complete, the American Psychological Association's PsycARTICLES, PsycINFO and PsycNET, Business Source Premier, Emerald Management, LexisNexis Academic, Military and Government Collection, ProQuest Central, SAGE Premier, ScienceDirect, Taylor and Francis Online. I employed the following terms and phrases (in various combinations): cohesion, Department of Defense, DoD high-performance team, effectiveness, efficacy, group, group cohesion, group effectiveness, high-performance group management, highperformance team, high-performing team, high-performance organization, highperformance public sector team, management, military, military team, organization, performance, performance management, public sector team, team, small group, team performance management, team potency, and team effectiveness. I expanded the keyword search to simply team and discovered several additional articles, but found only a limited number of peer-reviewed articles (e.g. DeChurch & Mesmer-Magnus, 2010a; Perry Jr., Karney, & Spencer, 2013; Veestraeten, Kyndt, & Dochy, 2014; Yammarino,

Mumford, Connelly, & Dionne, 2010; Young & Dulewicz, 2008) that deeply examined public sector teams'—particularly military teams'—unique experiences achieving characteristics of high-performance teaming or sharing best practices among other teams.

I conducted additional searches to identify the components of effective teaming and found related, influential theories with different perspectives about how team members are selected, how teams form, how teams operate in organizations, how teams are affected by member commitment and interdependence, and how team potency and effectiveness affect performance. I revisited the aforementioned databases to expand the literature search and identified peer-reviewed articles on leadership theory, motivation theory, and organizational theory for inclusion in this review. I also consulted several books about teams and the earlier identified related theories (e.g. Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 2006). Lastly, current examples of perceptions of effective and ineffective public sector teams (e.g. Dettman, Harty, & Lewin, 2010; Fryer, 2012; Iliano & Wade, 2010; Macqueen, 2011) were consulted to expound upon information identified in the research literature.

Theoretical Framework

A researcher depends upon a theoretical framework to lay the foundation for why a phenomenon deserves to be examined via a case study (Yin, 2003). I based this study on the theories of group dynamics (Lewin, 1944b; Newcomb, 1950; Sherif, 1949), small groups (Johnson & Johnson, 2013), and teaming (Edmondson, 2012). These authors of these theories explain the need for groups to work together to achieve a shared goal

(Johnson & Johnson, 2013) and the potential for effective performance in a team dynamic that addresses challenges and encourages learning from failure (Edmondson, 2012).

Lewin (1944b), Newcomb (1950), and Sherif (1949) made individual contributions to the study of groups and collectively emphasized the importance of understanding the group and the context in which the group existed. Lewin is credited with originating action research, the study of a phenomenon within its natural context (Adelman, 1993). Lewin (1943) noted that the theory explaining group dynamics should serve to help one's practical understanding of group dynamics rather than restrict understanding to theoretical confines. Newcomb (1950, 1953) and Sherif (1949) also employed group-focused action research and encouraged others to continue Lewin's earlier work focused on understanding the nature of individuals in groups and of groups in society (Lewin, 1943).

Lewin (1944a, 1944b), Newcomb (1950), and Sherif (1949) also contributed greatly to the theoretical foundations of group dynamics (Johnson & Johnson, 2013). Lewin's (1944b) early work on group dynamics included experiments affecting the dynamics experienced by the groups; these experiments yielded new insights into how these groups interacted when faced with incremental or significant changes. Lewin (1944a) separately articulated the need to recognize the dynamism of groups and the effects on groups caused by the group members' interrelationships (p. 395). Lewin (1944b) also found that examination of group dynamics yielded a need to understand related issues, such as the leader's effect on the group, culture and morale, performance measurement, and the organization of the group (p. 195). Lewin (1944b) called attention

to the importance of understanding groups and identified this understanding as critical to more than effective business output. Group dynamics, according to Lewin (1943), play a role in every aspect of every person's life and determine well-being and effective interactions at the societal level.

Building upon Lewin's (1944b) findings on group dynamics, Newcomb (1950) wrote that group members' roles defined the nature of the group itself. It was this "system of roles" (Newcomb, 1950, p. 284) that described the nature of a group at its most macro level. Groups with similar role systems, defined by the interactions of a group's members, were likely similar in focus or output (Newcomb, 1950). These roles and their associated behaviors also served an important purpose in defining the group's norms and fostering an environment in which each member can accurately predict the other's behaviors because group members understand one another's role(s) equally (Newcomb, 1950). In his literature review, Newcomb (1953) reiterated the dynamics of group roles and noted group cohesiveness as an important group property; cohesion between group member roles and behaviors can affect group effectiveness and performance.

Sherif (1949) similarly examined important components of group effectiveness and argued that a group member's capacity to exhibit desired behavior was a function of the situation in which the member existed; desirable behavior in one situation may not be replicated if the member's role or situation shifted contextually. Sherif (1958) went on to find that the practice of setting compelling and collaborative goals shared by all groups was a key determinant of group success and reduced group conflict. The author further

wrote that a key factor in reducing intergroup conflict was the recognition by the groups' members that they would not be able to achieve the desired goals by their own efforts alone. Sherif's (1958) identification of the components necessary to reduce intergroup conflict—shared sense of purpose, agreement on focus, and recognized interdependence—presaged Katzenbach and Smith's (1993, 2006) later work on effective team performance.

Katzenbach and Smith's (1993, 2006) definition of high-performing teams, as noted in the Chapter 1 "Operational Definitions" section, was foundational to this study's theoretical framework. Katzenbach and Smith's definition builds upon group and teaming theory fundamentals and delineates specific attributes of effective teaming that inform a framework for examining whether a team truly can be considered high-performing. These attributes include team size, duration and stability of team member composition, focus on a shared purpose or goals, the ability of team members to depend upon one another and to fill in for one another as required, and heightened commitment among team members (Katzenbach & Smith, 2006). Katzenbach and Smith's (2006) definition was also used to formulate the RQs and informed related semistructured IQs for data collection.

Other theories were examined to expound upon principles of group theory dynamics and discern how team composition and interdependence affect teaming.

Dulebohn, Bommer, Liden, Brouer, and Ferris (2011) wrote that leader, motivation, and organization theories describe how teams may be affected by adjustments in leadership, team member motivation and reward preferences, or organizational contexts. Emerson

(1976), in his social exchange theory, explained intra-team and micro-level interpersonal teaming dynamics. In their recent research on virtual teaming, Tannenbaum, Mathieu, Salas, and Cohen (2012) offered explanation of how modern teaming approaches align with Katzenbach and Smith's (1993, 2006) findings and definition of HPTs. Figure 1 shows a concept map representing this study's theoretical framework:

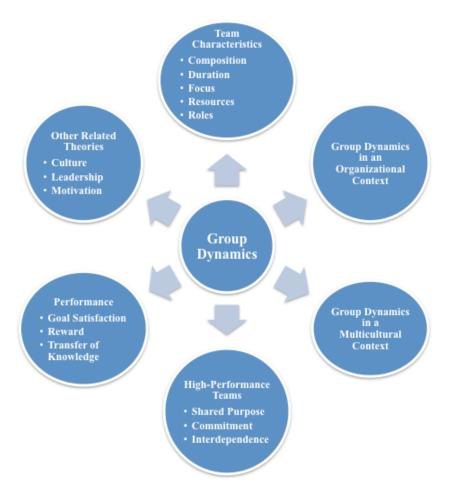


Figure 1. The framework depiction identifies concepts related to groups and teaming, including team characteristics; aspects of team performance; components of high-performance teams; and other related theories affecting team outcomes.

The concept map in Figure 1 highlights the theoretical foundations of this study: group dynamics (Johnson & Johnson, 2013; Lewin, 1944, 1946; Newcomb, 1950; Sherif,

1958) and teaming (Edmondson, 2012). Concepts defining, describing, and characterizing the nature of group and team interactions can be derived from the map. In addition to listing common components of teams, the concept map in Figure 1 also depicts measures of team performance and common aspects of HPTs, as defined by Katzenbach and Smith (1993, 2006). The map also notes the existence of differences between private sector and public sector teams, an important distinction that may have affected aspects of this study's findings as described in Chapters 4 and 5. Lastly, the map identifies other theories, such as leadership and motivation, which influence groups and teams. The concepts depicted in the map are further examined in the next section.

Teams: A Building Block for Life

Teams are a fundamental human experience. Johnson and Johnson (2013) wrote that all human interactions are rooted in teams. Similarly, Ray and Bronstein (1995) noted the anthropological context of teams suggested the odds of daily survival for early humans depended upon successful teaming (p. 125). Examples of effective teaming range from small personal matters—healthy, meaningful partnerships or marriages that can last a lifetime—to organizational feats that can change the world, such as developing vaccines to fatal diseases.

The literature is replete with variations on the definition of a team (Humphrey & Aime, 2014) and its numerous types (Hollenbeck, Beersma, & Schouten, 2012).

Examples of consistently predictable ways to improve team effectiveness, however, often are elusive (Barlage, Van den Born, van Witteloostuijn, & Graham, 2014; de Waal, 2005). In the sections that follow, I review the literature and examine definitions of a

team, the dynamic processes associated with "teaming" (Edmondson, 2012, p. 1), how teams achieve high-performing status (Katzenbach & Smith, 2006), and challenges to effective teaming.

Team Theory: What's in a Team?

The workforce experience has transitioned from a very small team dynamic, comprised of master and apprentice, to factories run by teams of workers specializing in a certain output (frequently overseen by yet additional teams of experts who search for ways to urge greater yield) to the virtual teams of today's knowledge-based organizations (Cordery & Soo, 2008; Edmondson, 2012; Johnson & Johnson, 2013). Teams even enhance leisure activities as exampled by athletes, dancers, actors, or musicians. Teams are foundational to public and private sector output and services (Edmondson, 2012; Katzenbach & Smith, 2006). In this section, I examine Katzenbach and Smith's (1993; 2006) widely used definition of an HPT: "[A] small number of people with complementary skills...who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable (Katzenbach & Smith, 1993, p. 112) . . . [and] who are deeply committed to one another's personal growth and success" (Katzenbach & Smith, 2006, p. 92). I also discuss the definition of a team, how and why teams form, and difficulties faced during a team's evolution and endeavors to be effective.

Teams, Defined

Seemingly everyone has a sense of what it means to be a part of a team (Katzenbach & Smith, 1993) or at least partial awareness of its definition (Humphrey &

Aime, 2014). Teams frequently are described as a group of people working towards a shared goal or purpose (Edmondson, 2012; Humphrey & Aime, 2014; Jiang & Chen, 2011; Katzenbach & Smith, 2006; Kleingeld, van Mierlo, & Arends, 2011; Nelson, 2010). Team members are expected to possess requisite proficiencies and be accountable for their contributions to the team's successful completion of its shared goals (Katzenbach & Smith, 2003). Teams are present in nearly every aspect of interpersonal life (Johnson & Johnson, 2012). The absence of teams or opportunities to become part of a team can limit an individual's potential (Edmondson, 2012).

Defining teams by type can be difficult, however, with disparate opinions contributing to a cacophony of classifications and causing confusion about the role of context when trying to define a team in precise terms (Hollenbeck, Beersma, & Schouten, 2012). In their examination of self-directed teams, Ray and Bronstein (1995) identified five types of work groups noting only one of them could be considered a proper team. An important contrast between *work groups* and *teams* is how much its members and their work are integrated (Ray & Bronstein, 1995).

Ray and Bronstein (1995) identified five types of work groups whose characteristics, when depicted along a continuum, transitioned from being highly dependent upon a leader for all decisions, which the authors labeled a "Type I Work Group" (p. 10), to becoming an autonomous team capable of shared leadership, which the authors labeled a "Type V Work Group" (pp. 17-18). In a "Type II Work Group" (p. 12), a specialist with functional expertise leads other specialists with similar knowledge in the same area. Leading Type II Work Groups may be challenging for leaders who possess

less skill knowledge than their subordinates, but this construct may be useful in a centralized organizational dynamic, according to the authors. In a "Type III Work Group" (p. 13), members begin to show slight functional interdependence and may even be able to enjoy making production-related decisions. Group rewards and group cohesion also emerge among Type III Work Groups, which work well in mass production environments (p. 13). A "Type IV Work Group" (pp. 13-14) is of limited duration, but exhibits some characteristics associated with HPTs (Katzenbach & Smith, 1993; 2006), such as purposeful consideration of team member expertise when establishing the group, team member role fluidity, and genuine "esprit de corps" (Ray & Bronstein, 1995, p. 16) so long as the work group exists. Katzenbach and Smith (2006), however, may not have defined Ray and Bronstein's (1995) Types I-IV Work Groups as "real teams" (Katzenbach & Smith, 2006, p. 44). The work groups fail as real teams because their duration is predicated on goal satisfaction (Ray & Bronstein, 1995, pp. 13-14), there is little discussion of mutual accountability (Katzenbach & Smith, 2006, p. 92), and the group's hard-won lessons learned are neither perpetuated nor preserved after the conclusion of the project which originally brought them together (Ray & Bronstein, 1995, pp. 13-14).

Many of the characteristics of Ray and Bronstein's (1995) "Type V Work Groups" (pp. 14-18), however, are shared with Katzenbach and Smith's (1993, 2006) descriptions of HPTs. Both types of groups enjoy shared leadership; consensus-based, agreed-upon goals; team member interdependence; and a small team size of between six and ten members (Katzenbach & Smith, 2006; Ray & Bronstein, 1995). Type V Work

Groups require significant organizational-level commitment to decentralized control, employee development, and human resource programs that meet team member needs at the individual and group levels (Ray & Bronstein, 1995). HPTs similarly enjoy decentralized, autonomous dynamics (Katzenbach & Smith, 2006). Ray and Bronstein (1995) and Katzenbach and Smith (2006) as well as Edmondson (2012) all found that Type V Work Groups and true HPTs are very rare. Although both types of groups are highly effective and enjoy group reward dynamics, descriptions of Type V work groups suggest that they are focused on effective outcome (Ray & Bronstein, 1995, pp. 14-18) while HPT members "are also deeply committed to one another's personal growth and success" (Katzenbach & Smith, 2006, p. 92).

Ray and Bronstein's (1995) taxonomy of work groups is useful in its depiction of how moving along the continuum from Type I to Type V work groups can lead towards improved performance. Katzenbach and Smith (1993) noted, however, that a key characteristic of working groups distinguishing them from HPTs is that a working group's members are focused only on their own, and not the group's, output and achievements. While Ray & Bronstein's (1995) group taxonomy supports the argument that many groups are not teams, the taxonomy fails to capture the breadth and dynamism of team type definitions. In their review of team types, Hollenbeck, Beersma, and Schouten (2012) identified more than 40 differentiations of teams based on *skill differentiation*, reflecting the team members' collective but unique skills and expertise; *authority differentiation*, reflecting the measure of centralized or shared leadership among team members; and *temporal stability*, reflecting the history of team members'

shared teaming experiences and anticipation of future teaming opportunities (p. 93). The identification of numerous team types likely is reflective of the many reasons teams emerge to meet new opportunities and challenges; contextualization of team type aligned with team purpose is important to discourage errant reliance upon a team perceived effective or simply owing to its complementary members or longevity (Berlin, Carlström, & Sandberg, 2012). Past team successes are not a guarantee for similar future outcomes.

Why Teams Form

People form teams to meet organizational or managerial requirements, such as an expansion of workload requirements that exceed one person's singular capacity (Edmondson, 2012; Katzenbach & Smith, 2006; Marin-Garcia & Poveda, 2010). In other cases, a group of people's specialized skills may be required for a demanding output, such as a technology-based product or a successful surgery (Edmondson, 2012). People who share similar goals or join together in a shared sense of purpose also naturally form teams (Johnson & Johnson, 2013). Prospective team members are drawn particularly to groups that exhibit equality, allow members a voice in determining outcomes of issues affecting the teams, and practice fairness (Poepsel & Schroeder, 2013).

Volunteers may heed the call for support to highly dynamic situations; the rapid construction of such teams likely is to prohibit lengthy and formal interview and vetting processes (Edmondson, 2012). In such cases, team members typically focus on the goal, serving in any capacity possible until the crisis is addressed (Katzenbach & Smith, 2006). These groups remain assembled only until operational *status quo* resumes. They then dissolve, its members wizened by the experience and their networks expanded. The

potential for individuals to volunteer again in such a situation likely are dependent, in part, upon the experience itself (Hollenbeck, Beersma, & Schouten, 2012). The dynamism of a team's requirements and formative experiences, including quick starts and stops, may inhibit deep consideration of team building through purposeful composition and team member selection (Edmondson, 2012).

Team Composition: Members

When building a team, managers and leaders may consider a number of factors. A team's composition may be informed by the nature of the task; the personalities and expertise of the available team members; the role and skills of a team's leaders; the associated intellectual, cultural, and generational diversity of the team members; the size of the team; individual team member commitment to the team; and organizational commitment to the team's support needs (Edmondson, 2012; Johnson & Johnson, 2013). Managerial selection, open competition, or self-selection often determines team member composition (Edmondson, 2012; LePine, Buckman, Crawford, & Methot, 2011; Mathieu, Tannenbaum, Donsbach, & Alliger, 2014). Those self-selectees who are strong in their orientation towards others' well-being may contribute to greater team effectiveness particularly when they perceive their ability to work together with other team members will lead to higher collective performance (Rutti, Ramsey, & Li, 2012).

Managers or leaders may wish for formulaic approaches to identify a good team, though organization context will likely prevail (Osborn & Marion, 2009). Team composition models distinguish between individual-based approaches, which prioritize individual team member traits and expertise to complete specific tasks, or team-based

models, which consider the collective synergy of the team to reach its goals (Mathieu, Tannenbaum, Donsbach, & Alliger, 2014). Managerial use of one model over another is likely a partially informed decision; the true potential performance capacity of a team's collective synergy may not be predictable fully (Hertel, 2011).

Managers may select team members based on function and team member interpersonal dynamics to improve team effectiveness (Belbin, 2010; Franck, Nuesch & Pieper, 2011). Assigning individuals to a group and declaring them suddenly a team, however, is unlikely to yield effective team performance (Gallegos & Peeters, 2011). This is particularly true when such teams are compared to teams who select team members purposefully for their knowledge, skills, and abilities (Gardner, 2012a). Thoughtfully constructed teams can further contribute positively to organizational performance (Gould-Williams & Gatenby, 2010).

Team composition focused on levels of expertise can contribute to successful group interaction (Aime, Humphrey, Derue, & Paul, 2014; Garrett, Caldwell, Harris, & Gonzalez; 2009; Summers, Humphrey, & Ferris, 2012). Examples of the types of desirable expertise include subject matter knowledge; situational context; technological skills (to facilitate tools necessary to effective team performance); knowledge of where non-team-owned expertise lies; excellent communications; and adept appreciation for how organizational information flows (Garrett, Caldwell, Harris, & Gonzalez, 2009; Pan & Wang, 2010). Individual team member expertise may also affect the nature of a team's ability to achieve desired levels of interdependence, which can further contribute to effectiveness and high-performance (Katzenbach & Smith, 2006).

Buljac, Van Woerkom, and Van Wijngaarden (2013) focused on task interdependence in their study of more than 1,200 team members of 183 teams and found that task interdependence alone is insufficient to guarantee desired team performance. Establishing team boundaries through shared team identity and ensuring team member stability was, however, found to improve team performance (Buljac, Van Woerkom, & Van Wijngaarden, 2013) though being able to select these effective, long-term members may not be possible if the organization is unable to recruit outside the current employee pool (Quader & Quader, 2009). Strong team identity also may reduce negative intrateam-member comparisons while fostering an environment in which team members are protected from negative effects observed when individuals possess differing perceptions of procedural justice, such as fairness (Du, Choi, & Hashem, 2012). Acknowledging team member contributions that make the group collectively stronger can reinforce team identity and its resultant solidarity (Koudenburg, Postmes, Gordijn, & Broekman, 2015).

Consideration of a team member's cultural predisposition towards individualism or collectivism as a predominant orientation can also improve performance (Wagner, Humphrey, Meyer, & Hollenbeck, 2012). A balanced team comprised of members representing both perspectives yields the most promising team performance results (Wagner, Humphrey, Meyer, & Hollenbeck, 2012). Additional discussion about the importance of cognitive and cultural diversity is offered later in this chapter.

Examination of an individual's personality traits may also help managers compose an effective team. Managers may need to look beyond traits, however, to inform team composition selection criteria (Cross, Erlich, Dawson & Helferich, 2008).

In other writings about the importance of careful team member selection, the authors wrote that team leaders particularly should be cognizant of the interplay among team member's personalities as they assume varied roles and responsibilities within the typically small team context (Halfhill, Nielsen, Sundstrom, & Weilbaecher, 2005; LePine, Buckman, Crawford, & Methot, 2011).

Additional non-trait-based approaches include consideration of a team member's associations with others. Cross, Erlich, Dawson, and Helferich (2008) found that awareness of each team member's professional network including ties to proficient experts was a greater contributor to success, particularly quick success, than traditional team development approaches which can be cumbersome and lengthy in evolution. These positions within the network also may affect team effectiveness based on individual access to important information available via informal communications and proximity to core team members, particularly among ongoing or high-tenure teams (Carboni & Ehrlich, 2013; Solis, Sinfield, & Abraham, 2013; Warner, Bowers, & Dixon, 2012). Managers are cautioned, however, that assigning successful, well-connected, individual team members to multiple teams may actually decrease overall effectiveness. In such dynamics, the multi-team members attempt to juggle time, task, and role challenges while also failing to achieve the same levels of support from team members who enjoyed being a member of just one team (Pluut, Flestea, & Curşeu, 2014).

Simply amassing a team of singularly high performers does not guarantee effectiveness in a team dynamic (de Waal, 2005; Katzenbach & Smith, 2006; Lam, Van der Vegt, Walter, & Huang, 2011). At times, a group may possess a "superstar"

(Nihalani, Wilson, Thomas, & Robinson, 2010, p. 500), a member whose intellect comparatively is higher than other team members as defined by scores achieved on individually tested tasks. Such independent high achievers may affect negatively the team's overall success as other members contribute less equally (Chen, Zhang, & Latimer, 2014; Nihalani, Wilson, Thomas, & Robinson, 2010) or perceive their contributions are lacking or valued less than those of the high performer's (Chen, Zhang, & Latimer, 2014; Lam, Van der Vegt, Walter, & Huang, 2011), ultimately affecting the non-HPT member's commitment to the team and its goals. Emphasis on team identity instead of individual competence or expertise levels may also overcome instances in which less capable team member display jealousy of high performers that can deter overall team effectiveness (Kim & Glomb, 2014).

Where significant experiential and educational differences exist, team members can focus on team identity to overcome disparate team member characteristics and yield positive performance (Bezrukova, Jehn, Zanutto, & Thatcher, 2009). In some cases, organizational leaders seeking to build effective HPTs from the existing employee pool may find it necessary to invest in training and effective leadership to achieve success (Warrick, 2014). Evidence exists, however, that high-performance work systems may emerge without managerial intervention when employees are motivated, committed, identify positively with their work teams, possess the ability to field tasks competently, and where bad management does not countervail these positive phenomena (Ingvaldsen, Johansen, & Aarlott, 2014).

Team Composition: Leaders or Lack Thereof

Akdemir, Erdem, and Polat (2010) wrote that members should be chosen carefully to enable success. The authors likened the team's leader to the mind guiding the team's body. Team empowerment has been found a positive predictor of team performance (Seibert, Wang, & Courtright, 2011). Team empowerment achieved through decentralized decision-making and communications is also important (Akdemir, Erdem, & Polat, 2010). The literature, however, does not identify fully how leadership, particularly shared leadership, specifically impacts a project team or whether it is the nature of the project which determines the viability of successful shared leadership among the project team's members (Clarke, 2012a; Clarke, 2012b). The metaphorical view of a team leader as the intellect driving corporal team decision-making (Akdemir, Erdem, & Polat, 2010) belies the encouraged interdependence and egalitarian flexibility described and desired in teams by others (Edmondson, 2012; Gardner, 2012a; Hollenbeck, Beersma, & Schouten, 2012; Katzenbach & Smith, 2006; Mathieu, Tannenbaum, Donsbach, & Alliger, 2014; Pentland, 2012).

Edmondson (2012) wrote that three key phenomena are critical to team success: the leader's role, the team's role, and the project's purpose. The leader is the face of and champion for the team; as spokesperson, the leader is responsible for empowering the team's output by identifying, envisioning, and explaining the team's capacity to exceed expectations (Edmondson, 2012). The leader is also charged with serving as a caregiver of sorts, encouraging respect and appreciation for and within the team (Edmondson, 2012). Chapter 4 describes further support for Edmondson's (2012) writings on leaders.

Perhaps the leader's best means of accomplishing this is to act as a living example, stepping in to do the work when needed and ensuring all members feel valued for the unique capabilities they contribute to the team's outcomes (Edmondson, 2012). An effective leader will be able to communicate this vision in such a way and within a periodicity that is sensitized to the team's need for encouragement, discipline, or accolade (Edmondson, 2012) and attuned to the organization's context (Osborn, Hunt, & Jauch, 2002; Osborn & Marion, 2009). Elite team leaders must also navigate the dynamic sociopolitical complexities resident within the team, organization, and among external entities, all of which can affect the performance (Collins & Cruickshank, 2015).

The organization's context will also affect the nature of the leader-team structure (Johnson & Johnson, 2013). Formerly decentralized teams may be less able to move to a centralized structure than formerly centralized teams who must move to a decentralized structure (Hollenbeck, Ellis, Humphrey, Garza, & Ilgen, 2011). Decentralized teams moving to a centralized structure can encounter difficulties caused by the move itself (Hollenbeck, Ellis, Humphrey, Garza, & Ilgen, 2011). They may further fail to yield the efficiency typically associated with centralized structures or the type of efficiency managers affecting the structural change had hoped to achieve (Hollenbeck, Ellis, Humphrey, Garza, & Ilgen, 2011).

Groups performing more complex tasks have been found to be more satisfied with a decentralized decision making structure (Mayer & Dale, 2010). Team members who enjoyed shared or distributed leadership among one another were also more satisfied with

the team experience (Wang, Waldman, & Zhang, 2014). Both distinct practices allow team members to more readily own and address the problem they face as a group.

Conversely, team satisfaction (Mayer & Dale, 2010) and performance (Crawford & LePine, 2013) improved when a centralized approach was used to address simple tasks. The above findings suggest that careful consideration is warranted before practitioners rationalize the implementation of an efficiency-driven move to centralization when a decentralized approach has yielded identifiable measures of desired team performance, even if the performance has not met all goals under the decentralized construct. True HPTs experience decentralized or shifting leadership responsibilities among team members; interdependence of task completion and team member skill sets determine dynamic roles and improve overall performance (Katzenbach & Smith, 2006).

Given leaders' important roles and influence of others, their behaviors are critical to a team's success, particularly if leaders empower, ask questions instead of directing answers, and focus on addressing team context and member needs vice a Taylorist devotion to process (Edmondson, 2012). Charismatic leaders who encourage positive change can influence positively a follower's level of commitment to the team, ultimately contributing to overall team performance (Nohe, Michaelis, Menges, Zhang, & Sonntag, 2013). Leaders who effectively employ a balance of transformational and transactional leadership behaviors may also contribute positively to overall team cohesion, collaborative approaches, and communication behaviors (Yang, Huang, & Wu, 2011).

Team Roles: Function and Personality

Hu and Liden (2011) found that designing teams with specific consideration of how members' roles align with goals and desired output could improve team effectiveness, a finding noted earlier by Newcomb (1950). Belbin (2010) identified nine specific roles team members may share as they pursue team goals, such as

- a plant who serves as a problem-solver;
- a resource investigator who acquires team requirements and identifies prospective projects;
- a coordinator who ensures the team understands its objectives and encourages action;
- a shaper who resolves team challenges;
- an evaluator who astutely discerns possibilities;
- a teamworker who soothes abrasive and unproductive conflict even before it begins;
- an implementer whose actions yield resolution;
- a finisher who ensures the team meets goals and deadlines without sacrificing accuracy; and
- a specialist who contributions to team success are specific and extraordinary (Belbin, 2010, p. 22).

Belbin (2010) wrote that a team member may act in more than one role at a time and would still require other knowledge, skills, and abilities to meet the team's goals because

the roles are descriptive of behaviors and do not address specific informational or functional expertise required for the team's task(s).

Identification of team members who serve in specific behavioral or functional positions can act as a significant predictor of overall team performance (Humphrey & Aime, 2014). Belbin (2010) encouraged active managerial intervention to identify team member capacity to meet the requisite behavioral roles. Other authors also encouraged similar intervention to ensure alignment with team and organizational goals requiring functional expertise (Hu & Liden, 2011; Humphrey & Aime, 2014).

Team roles: personality. Team member personality is an important indicator of an individual's capacity to work with others and can affect overall team effectiveness (Halfhill, Nielsen, Sundstrom, & Weilbaecher, 2005; LePine, Buckman, Crawford, & Methot, 2011). The Five Factor Model of Personality differentiates individual personality according to five categories of dispositions, including

[1] *Conscientiousness*...the degree to which a person tends to be dependable, organized, reliable, ambitious, hardworking, and persevering...[2] *agreeableness*...an individual's tendency to be helpful, friendly, warm, and cooperatives...[3] *extraversion*...the proclivity to be sociable, enthusiastic, energetic, and optimistic...[4] *emotional stability*...the degree that someone is calm, secure, and steady... [and 5] *openness* to experience...the tendency to be curious, imaginative, broad-minded, and sophisticated. (Fiske, 1949, as cited in LePine, Buckman, Crawford, & Methot, 2011, p. 312)

Although it is impossible to predict fully how a team member's personality will affect the team's performance (LePine, Buckman, Crawford, & Methot, 2011), Aubé and Rousseau (2011) found that team member attributes could affect team performance and viability or efficacy. For example, a team member's predisposition to aggressive behaviors can lead to negative team performance (Aubé & Rousseau, 2011).

A team's collective efficacy, conversely, can play a positive role in mediating challenges to a group's potency and is related positively to the team's overall performance (Stajkovic, Lee, & Nyberg, 2009). Similarly, a team member's interpersonal efficacy, the measure by which s/he believes another team member can contribute the necessary inputs to affect team output, was found to impact positively team effectiveness when team members interacted and perceived that each teammate was a necessary contributor to overall team success (Emich, 2014). Aime, Humphrey, Derue, and Paul (2014) cautioned, however, that solely focusing on a team member's qualities fails to consider the broader effect team member perceptions of one another can have on the team's collective success (Kivlighan, Li, & Gillis, 2015).

Differences in perceptions can be measured both to determine varying dimensions of perceived group cohesion (Leo, González-Ponce, Sánchez-Oliva, Pulido, & García-Calvo, 2015) and to determine areas requiring remedy through managerial team-building intervention (Kenny, Gomes, & Kowal, 2015). Teams can overcome cognitive diversity and improve performance by getting to know other team members' preferences (Mesiec & Graff, 2015). A shared team understanding of one another's core beliefs and any

issues that the team member may find sensitive to discuss also facilitates group cohesion (Meslec & Graff, 2015).

Team roles: effects of personality on team reward preferences. In the same way culture and personality can affect team performance, managers may wish to consider a team member's nationality and associated cultural context for insights into whether high-performance work systems intended to encourage or reward employee output will be successful (Gilman & Raby, 2013). A team member's individual level of extroversion and agreeableness influences the member's response to reward structure and team dynamic, for example, and affects the member's functional ability to meet the task's need for speed or accuracy for successful completion (Beersma, Hollenbeck, Humphrey, Moon, Conlon, & Ilgen, 2003). Extroverted and agreeable team members worked better when a cooperative reward structure that linked their rewards to the output of the entire team was encouraged whereas introverted and less agreeable team members performed better when performing their rewards were not tied to others' efforts (Beersma, Hollenbeck, Humphrey, Moon, Conlon, & Ilgen, 2003).

When people work interdependently, cooperative rewards may slow the team's speed but may also encourage accuracy (Beersma, Hollenbeck, Humphrey, Moon, Conlon, & Ilgen; 2003). This finding contrasts Frick, Goetzen, and Simmons' (2013) later observations that teamwork and performance pay reward structures may have hidden costs such as degradation in overall production quality in favor of quantity (output) increases or a potential increase in absenteeism as team members look to one another to cover each other's absences. Managers may thus consider structuring rewards

to encourage positive, collaborative behavior to mediate aspects of a team member's prioritization of self-interest over team performance, particularly when accuracy is desired. Organizations that offer rewards equitably, based on individual contribution to overall team outcome, may contribute to better overall team performance than simply distributing reward equally among all team members (Garbers & Konradt, 2014).

The identification of team member personality traits to optimize the team's overall interpersonal interactions through reward structures presupposes that organizations have accurate knowledge of their personnel via personality tests and have a sufficient pool of employees to assign them to special purpose teams accordingly—a dynamic that may not always be available to public sector managers. Johnson and Johnson (2013) called upon team leaders to encourage collective, cooperative team member behavior instead of emphasizing an individual team member's contributions. Employment of such a singular emphasis, however, could create an undesirable competitive environment within the team (Johnson & Johnson, 2013).

The Role of Diversity

Just as precise and formulaic discriminants are lacking for team composition models, formulas for effective team diversity based on team composition or task are lacking (Humphrey & Aime, 2014). Diversity can have positive or negative effects on a team's overall performance (Agrawal, 2012; van Knippenberg, van Ginkel, & Homan, 2013). Diversity among top management teams has been found to address the challenges of short-term performance and support longer-term strategic organizational change like reorganization (Naranjo-Gil, 2015). Some members may be unaware of the role that

diversity plays within the group context, particularly if a group member is unaware that other members hold a perception that the group member benefits from an unacknowledged societal or cultural privilege (Miles & Kivlighan, 2012).

Diversity: personality considerations. Varying types of diversity can yield different impacts. Personality diversity can improve task performance, such as when introverts and extroverts work together to fill roles and communication styles they naturally exhibit (Sung, Choi, Kim-Jo, 2014). Gender diversity, particularly an increase in the number of female members in a group, may reduce group conflict (Lo Coco, Gullo, Lo Verso, & Kivlighan, 2013). Conversely, this same dynamic may negatively impact overall team performance if cultural contexts, such as predisposition to gender egalitarianism, do not support mixed gender teaming (Schneid, Isidor, Li, & Kabst, 2014).

Diversity: cognitive and values-based considerations. Collaboration built upon a strong foundation of diversity may be prized highly in teams. Cognitive diversity may lead to positive outcomes, such as innovation (van Knippenberg, van Ginkel, & Homan, 2013). Team cohesion, team efficacy, and reduction in conflict are correlated positively with lower levels of value diversity (Woehr, Arciniega, & Poling, 2013). This suggests that practitioners may benefit from considering potential team members' value constructs when examining team composition opportunities. For example, a team's collective cultural predisposition towards continuous learning may be a stronger determinant of effectiveness than simply the presence of diversity (Lourenço, Dimas, & Rebelo, 2014).

Capitalizing on cognitive diversity by integrating knowledge through shared interactions and the development of shared beliefs can improve an HPT's ability to achieve complex goals (Dietrich, Eskerod, Dalcher, & Sandhawalia, 2010). It may also encourage successful innovation processes (Nissen, Evald, & Clarke, 2014). Sharing knowledge effectively among diverse teams is improved when organizations support a culture of knowledge sharing among teams vice focusing on individual team member (Mueller, 2014). This requires organizational leadership to allow team members the time to develop knowledge sharing relationships and to flatten the organizational structure such that bureaucracy or time-consuming hierarchies do not hinder effective collaboration (Mueller, 2014).

Leaders can encourage teams to focus on a current task to help mediate identified conflict deriving from cognitive or values-based diversity divergence(s) among team members (Klein, Knight, Ziegert, Lim, & Saltz, 2011). Early alignment of team member preference towards intrinsic values, such as self-development and helping others, vice extrinsic values, such as prestige and income, may further reduce conflict because team members will experience satisfaction of their desire for autonomy and relatedness, among other basic needs (Schreurs, van Emmerik, van den Broeck, & Guenter, 2014). When diversity leads to relationship-based conflict, however, resolution may be more difficult and could affect negatively task completion and team member satisfaction (Shaw, Zhu, Duffy, Scott, Shih, & Susanto, 2011).

Diversity: cultural considerations. Cultural diversity may contribute to the establishment of shared mental models that can moderate the negative impacts of conflict

(Paletz, Miron-Spektor, & Lin, 2014; Santos & Passos, 2013). Cultural values, such as collectivism, have been found to have a positive effect on knowledge sharing; others, however, such as saving face, can negatively impact knowledge sharing (Zhang, de Pablos, & Xu, 2014). Managers may consider aligning team member preferences towards cultural diversity and reward structures to gain synergy among team members and improve team effectiveness; misalignment may be remedied through educating team members on the benefits of cultural diversity (Opute, 2012).

Diversity: multigenerational considerations. Team member generational differences can yield team strengths and weaknesses. Each generation possesses a different approach to work, attitude towards collaboration, and expressed level of commitment to the shared goal(s) (Salahuddin, 2010). Complex differences among multigenerational team members may also yield challenges, such as how and when team members receive feedback from organizational leaders (Bennett, Pitt, & Price, 2012).

Properly managed, differences can be used to the team's benefit by encouraging each generation to work to its strengths. For example, a younger generation's predisposition to collaboration or technical knowledge can complement a more experienced generation's deep knowledge developed over a lifetime of learning (Bennett, Pitt, & Price, 2012; Salahuddin, 2010). Mentoring and widespread use of teams in the workplace can also mediate potential multigenerational challenges (Joy & Haynes, 2011). Similarly, team members who are aware of their perceptions of one another beyond the expertise and experience each member brings to the team may improve overall team performance (Sierra, Andres, Solanas, & Leiva, 2010).

Diversity: embraced. Organizational leaders providing feedback were found to be more effective if they were perceived as part of the group; in-group members have been found to question out-group members' motives, thereby diminishing the impact of the feedback (Morier, Bryan, & Kasdin, 2013). The misattribution of out-group motivations can also contribute to the evolution from task to relationship conflict, which is often more difficult to resolve (Xie & Luan, 2014). Considering the link between well-being and the degree to which a person identifies him- or herself as part of a group (Yampolsky & Amiot, 2015), a successful out-group attack on another group's identity or the loss of a group's identity may cause in-group member distress, decreased sense of self, and diminished self-esteem (Slotter, Winger, & Soto, 2015).

The presence of too many types of diversity on a team can create inadvertent team member divergences and negatively impact group performance (Bezrukova, Spell, Caldwell, & Burger, 2015). Such distractions may be remedied by focusing the team on an external challenge or threat to the team's performance (Bezrukova, Spell, Caldwell, & Burger, 2015). This emphasis on external threats to refocus team integration is context-dependent and could fail if repeated frequently over the course of a team's history; the practice has been found to undermine overall team integration and performance over time (Knight & Eisenkraft, 2014). Left unchecked, divergences may also lead to broader, negative organizational-level performance impacts (Bezrukova, Spell, Caldwell, & Burger, 2015).

Diversity achieved through team member experiences gained participating in multiple teaming opportunities can encourage a broadened intercultural understanding

and collaborative network. This practice would ultimately yield members who could apply practical skills across the teams in which they serve (Edmondson, 2012). The members could also serve as connectors between teams as their experiences expose them to others within the workforce (Pentland, 2012), at least some of whom they may not otherwise have known, and are thus then able to example positively the power of diversity in achieving team goals.

Team Size

Within composition lies the question of how many members are required for an effective team. Small teams comprised of the least amount of team members possible who are still able to perform the team's charter are often encouraged so that consensus does not become so complex it affects a team's ability to remain agile, innovative, and capable of meeting its goals (Johnson & Johnson, 2013; Katzenbach & Smith, 2006). Johnson and Johnson (2013) warned that large team dynamics frequently affect teams, such as when team members assume that their contributions were so small that they were not worth offering. Such a perception may affect the team's ability to attain cohesion, particularly given the overall effects on individual and team empowerment (Tuuli & Rowlinson, 2009).

Groups with high cohesion are able to attract and retain desired team members.

This is particularly true when they also exhibit high levels of defining themselves as a group vice simply an amassing of several individuals (Spink, Ulvick, McLaren, Crozier, & Fesser, 2015). Similarly, successful groups are more likely to retain individuals as

longer-term group members than less successful groups or groups that did not fulfill the individual's basic needs (Wirth, Turchan, Zimmerman, & Bernstein, 2014).

Team size: stability. Consideration may also be given to the effect caused by a team member's longevity or stability within the team dynamic. Team composition stability is important to a team's success (Mathieu, Tannenbaum, Donsbach, & Alliger, 2014; Summers, Humphrey, & Ferris, 2012). The stable presence of a team's members yields opportunities for improved performance and process knowledge (Noe, Dachner, Sacton, & Keeton, 2011). Frequent membership changes or organizational contexts rife with high dynamism may affect negatively the development of the strong links necessary between team members to create predispositions to collaboration (Rank & Tuschke, 2010) and interdependence (Katzenbach & Smith, 2006). Teams whose members change frequently, however, may benefit from the introduction of new ideas, leading to innovation (van Knippenberg, van Ginkel, & Homan, 2013).

Team size: transience. Teams whose members largely are transient in nature must quickly build trust and a shared history through swift wins and a leader-influenced, positive work environment to lay the foundation for effective performance (Ricketts & Willis, 2010). Military teams have been shown to form and develop bonds quickly (Perry Jr., Karney, & Spencer, 2013). Military air crew teams were found to build trust quickly by establishing an environment of care, recognition, transparency, and limiting a team member's fear of rejection; all of these characteristics were built upon a foundation of deep team member role and technical expertise (Moldjord & Iversen, 2015).

Transience also affects team member trust. Trust among short-term teams or teams which formed early on in a team's history is not comparable to that formed within an ongoing team whose members can anticipate working together again at a future date (De Jong & Elfring, 2010). Longer-term, ongoing team member trust can develop the members' abilities to recognize and respond to one another's needs (De Jong & Elfring, 2010); serve as a moderator for task conflict thereby improving overall job performance (Lee, Lin, Huan, Huang, & Teng, 2015); and encourage the highly desired interdependence for which HPTs are renowned (Katzenbach & Smith, 2006). Trust also can be fostered through a team's learning practices, including continuous reflection on team actions and processes and the employment of constructive conflict; trust developed in this fashion can improve both coordination quality and team performance (Wiedow, Konradt, Ellwart, & Steenfatt, 2013).

Teams: Building Commitment

Trust also plays an important role in building team member commitment to the team and organization. Edmondson (2012) noted intellectual and emotional commitment could be inculcated in teams where members know they specifically were selected for participation. Team member commitment among military teams may be strengthened due to the unique situations the teams face, yielding an attachment among the team's members that can encourage significant individual exertion to ensure the team's well being (Veestraeten, Kyndt, & Dochy, 2014). This level of shared commitment may be distinct from non-military teams due to the intense situations military team members face together (Veestraeten, Kyndt, & Dochy, 2014). Strengthened commitment in non-

military teams may be enhanced when team members are motivated to prioritize effort towards the group's benefit rather than their own benefit; such prosocial motivation has been found to improve team effectiveness and performance (Hu & Liden, 2015).

Commitment similarly is affected by the team member's sense of belonging. A team member's ability to self-identify as part of a group can be an important factor in laying the foundation for strong group potency and can aid in the group's overall performance (Lee, Farh, & Chen, 2011). Team member comprehension of the interdependence among group goals and membership has been found to contribute to individual success (Lee, Farh, & Chen, 2011). Edmondson (2012) also noted, however, that today's complex operational environments render it impossible to predict correctly which member skills or knowledge will be required for a team's goals, particularly as these decisions are sometimes based on an assumption of static need instead of an appreciation of and planning for highly evolving organizational dynamics.

Typically, interactions that adhere to expected norms form over time and yield commitment among the individuals sharing them (Cropanzano & Mitchell, 2005). The stronger the commitment, the more likely the individuals are to cooperate (Cropanzano & Mitchell, 2005). Strengthened commitment can also encourage innovation and the taking of risks as interdependent individuals enjoy a foundation of trust that allows for learning from mistakes (Edmondson, 2012). Strong commitment levels are influenced by a leader's behaviors within his or her leader-member exchange relationships (Asgari, Silong, Ahmad, & Samah, 2008; Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011).

Commitment among team members to one another may be different from the individual team member's commitment to the organization. De Waal and Frijns (2011) wrote that employees of higher performing organizations felt "a moral obligation to continuously strive for best results" (p. 8), suggesting another level of employee commitment. This aligns with Katzenbach and Smith's (1993) assertion the very "essence of a team is common commitment" (p. 112) to both other team members' personal and professional growth (2006, p. 92) and to the organization in which the team works in its endeavors toward high-performance.

Organizational-level commitment may fall long three lines: affective, continuance, or normative (Curtis & Wright, 2001). Affective commitment, whereby an individual's emotional attachment to the organization is developed, may be influenced by the individual's sense of being part of the team; level of satisfaction with his or her superiors; performance feedback; and individual predisposition to contribution (Curtis & Wright, 2001). The potential for an individual's continued commitment rests in reward-related factors, such as salary, professional development, work-life balance opportunities, and other benefits (Curtis & Wright, 2001). Lastly, the individual's sense of obligation to the organization, his or her normative commitment, is influenced by the individual's experience, perceived level of reciprocal organizational commitment to the employee, and related job training and challenging work (Curtis & Wright, 2001).

Teams: Toward Synergy

Team members who appreciate or at least understand one another's strengths and weaknesses can achieve high levels of collaboration (Edmondson, 2012), rendering the

whole of the team greater than its singular parts and capable of improving effectiveness even as task complexity increases (Kleingeld, van Mierlo, & Arends, 2011). Such effectiveness is further supported when teams share accurate mental models or similar contextual understanding (Pan & Wang, 2010). These conditions can improve relative performance compared to other teams. When managerial predetermination of the need for a team predominates the team's formation, however, team members may have little input about team composition or construct. This can cause the team to focus on overcoming overcome emergent interpersonal issues that distract and could affect the team's ultimate ability to reach its goals or meet its purpose (Edmondson, 2012).

Team Effectiveness

Effective teams possess a flexibility to address competitive forces and unexpected change (Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 2006). For the purpose of this study, team effectiveness was defined as how well a team achieves its own, organizational, or other pre-established goals (Johnson & Johnson, 2013; Rosen et al., 2010) as assessed by outcomes, cohesiveness, and associated satisfaction with the final result(s) (Lira, Ripoll, Peiro, & Gonzalez, 2007). A team's perceptions of its effectiveness may be informed by the members' educational levels, the team's culture, the team's predisposition toward innovation and commitment to change, and the organization's contextual level of support (Strating & Nieboer, 2012).

The team's ability to address a team member's undermining behavior is also a determinant of effectiveness (Aubé & Rousseau, 2014). Such negative behavior may be improved by incorporating team-building and other team-level remedies as well as

addressing the individual personality predisposed to negative behavior manifestation (Aubé & Rousseau, 2014). In a recent study, the authors suggested guarding against the observed predisposition of managers to assess group effectiveness simply by measuring the frequency of overall group inputs instead of looking at individual group member participative contribution(s) (Podsakoff, Maynes, Whiting, & Podsakoff, 2015).

Several authors developed models to frame the processes or characteristics of effective teamwork. Many examinations of team effectiveness use McGrath's (as cited in Summers, Humphrey, & Ferris, 2012) model measuring three dimensions: input, process, and output. The three aspects are dynamic in that all three influence one another and also influence the team's end product result (Summers, Humphrey, & Ferris, 2012). It is difficult, however, to calculate how dynamic change affects these dimensions because measurement reflects a single moment in time (Summers, Humphrey, & Ferris, 2012).

Another model identified team competencies, identity, planning and decision-making, and self-management as critical factors to effective team performance (Militello, Kyne, Klein, Getchell, & Thorsden, 1999). Managers can employ assessment tools to measure team competencies (Aguado, Rico, Sánchez-Manzanares, & Salas, 2014). Not all tools, however, offer consistently reliable and valid results from which managers can assess collective member potential for team effectiveness (Aguado, Rico, Sánchez-Manzanares, & Salas, 2014).

Courtney, Navarro, and O'Hare's (2007) Dynamic Organic Transformational (DOT) model identified five aspects necessary to an effective team: purpose, people, partnerships, process, and performance. These dimensions roughly align with McGrath's

(as cited in Summers, Humphrey, & Ferris, 2012) original conception of input (purpose, people), process, and output (performance). The dimensions may also help to codify dynamic experiences, such as the need for collaboration through partnerships outside the team's core members (Linden, 2010). Such collaboration, particularly in the public sector, may be improved by building upon stewardship theory principles whereby seemingly disparate entities focus on shared goals and self-management to achieve desired outcomes (Schillemans, 2013).

Taylor's prototypical managers of process teams—those focused on manufacturing, for example—embraced practices that restricted a team member's experience to that of solely producing more, often without understanding how it affected the organization's other employees or teams (Shafritz, Ott, & Jang, 2011). Interaction between team members or with other teams can expose members to a more holistic understanding of the work at hand (Edmondson, 2012). Seemingly independent teams, such as sales and manufacturing teams, can also improve overall output and efficiency by understanding one another's processes, challenges, and constraints (Edmondson, 2012). Similarly, effective communication and appreciation for the organization's major goals can also aid in team member development of a vision for success.

Team effectiveness: accountability. Two types of accountability—
accountability for one's own individual contributions to achieving team goals and,
separately, accountability to the team—affect team effectiveness (Edmondson, 2012;
Katzenbach & Smith, 2006). Katzenbach and Smith (2006) stated that true teams
extended beyond individual accountability towards a mutual accountability in which all

members were accountable to one another for desired outcomes, an atmosphere of respect, and equality. Such a sense of egalitarian place or opportunity for participative management encourages positive teaming outcomes (Edmondson, 2012), particularly when the team's practices do not marginalize individual contribution (Gardner, 2012a). Individual contribution and accountability through self-leadership can improve both individual and overall team performance (Hauschildt & Konradt, 2012).

Team effectiveness: organizational context. Team effectiveness may be influenced by the organizational context or complexity in which the teams reside.

Organizations or cultures that are competitive or prioritize achievement over collaboration are likely to experience diminished knowledge sharing, thereby negatively impacting team effectiveness (Wiewiora, Trigunarsyah, Murphy, & Coffey, 2013).

Teams can address the dynamism that complicates the ability to predict outcomes in complex systems by comparing traditional linear forecasts over time (Edmondson, 2012).

Team effectiveness: strategy-building. HPTs that focus on early strategizing frequently improve team effectiveness and quickly gain synergy, even if the teams only briefly discuss planning or a strategy prior to commencing work (Bechky & Okhuysen, 2011; Crawford & LePine, 2014; Guglielmi et al., 2011; Rentsch, Delise, Salas, & Letsky, 2010). These findings build upon Lewin's (1944) earlier discussions highlighting the importance of pre-activity team discussions as a means to motivate individuals to overcome personal desires in favor of group goals (p. 198). Development of strategies, particularly prior to the loss of a core or critical team member whose unique knowledge impacts other team members' abilities to achieve goals, is also crucial to a team's ability

to move past the loss and optimize shared memory and knowledge encapsulated in an intact team's transactive memory system (Christian, Pearsall, Christian, & Ellis, 2014).

Organizational investment in planning and strategizing also has been found valuable particularly for intellectual, executive teams compared to manufacturing, production teams which benefitted more from monitoring progress and coordinating output efforts (Honts, Prewett, Rahael, & Grossenbacher, 2012).

Strategy development may benefit from structured brainstorming sessions.

Brainstorming may be most effective if conducted individually, then jointly as a group.

Individuals may expect groups to generate more ideas per capita than if the group

members brainstorm separately, according to a recent study (Jones & Lambertus, 2014).

Still, brainstorming sessions may be improved by encouraging team members to focus

initially on abstract issues before moving through specific cues; this approach allows

team members to access their deep memories related to the cued topic without the

distraction of concurrently considering multiple topics and cues (Deuja, Kohn, Paulus, &

Korde, 2014). The results can be used in future team meetings.

Team members with diverse levels of historical organizational knowledge and perspectives who jointly attend staff meetings during which goals are discussed can also, over time, positively contribute to improved post-meeting productivity (Crawford & Leonard, 2012). Care should be taken in the multicultural team context, however, to ensure alignment of meeting expectations across the diverse teams (Lehmann-Willenbrock, Allen, & Meinecke, 2014). Cultural differences emanating from varying approaches to problem-solving, process, emotional support, and action-oriented outcomes

may derail meeting success if the differences are not acknowledged and better aligned through tailored training (Lehmann-Willenbrock, Allen, & Meinecke, 2014).

Simple tasks require less planning and strategizing; team performance improved, however, when time was spent on pre-planning and strategizing before undertaking complex tasks (Crawford & LePine, 2013). The formation of a charter defining team rules, processes, and expected norms can further contribute to team effectiveness (Byrd & Luthy, 2010). These norms and quick, early successes (Katzenbach & Smith, 2006) can contribute to building team rapport, belief in the team's capabilities, and developing interpersonal trust, fundamental to team cohesion.

Team effectiveness: the role of collaboration. Collaboration among team members also has been found to be critical to effectiveness, particularly when the team's collective communication and collaboration networks are examined and well understood (Zenk, Stadtfeld, & Windhager, 2010). Dietrich, Eskerod, Dalcher, and Sandhawalia (2010) found eight areas that affected collaboration among team members, including clarity in role assignment and collaboration process(es); trust; proximity between members in terms of both location and culture; ensuring appropriate incentives; group member commitment to collaboration; collaborative, congruent goals; a means by which to resolve conflict; and fulfilling group member expectations. The authors found that HPTs were able to utilize collaborative processes to gain superior performance by capitalizing upon the synergies associated with shared individual knowledge (Dietrich, Eskerod, Dalcher, & Sandhawalia, 2010).

Such synergy further yields new knowledge, team member links to extra-team networks that expand the team's overall network in terms of expertise and diversity, and a collective predisposition to self-directed learning owing to the team's appreciation for failure or disturbances to the *status quo* as opportunities to learn (Dietrich, Eskerod, Dalcher, & Sandhawalia, 2010; Nissen, Evald, & Clark, 2014). Although social network analysis in groups is a relatively new approach (Wölfer, Faber, & Hewstone, 2015), recent research found that team member collaborative networks also contributed to team potency and performance if the networks were dense and centralized respectively (Tröster, Mehra, & van Knippenberg, 2014). A balance is necessary, according to the authors, to ensure centralized nodes and the team members who represent them do not become overwhelmed by the associated workload. The importance of the role of shared incentives was also identified in a case study of public sector teams whose performance improved through shared responsibility, appreciation for one's team members, and an ability to maintain "long-sightedness" (Berlin, 2014, p. 65) of the team's purpose, members, and shared experiences leading to trust.

Other foundations of effective collaboration include a shared sense of purpose (Goodall, 2013), a desire to affect collaborative results, appropriate collaborative partner composition as defined by partner expertise, openness, passion, and trust (Linden, 2010). These contribute to characteristics observed within effective and HPTs (Edmondson, 2012). Establishing processes that encourage team member reflection can also improve team effectiveness by contributing to the team's ability to accurately assess and adjust to the situation it faced (Arnulf, 2012).

Similarly, awareness of one another's needs; effective communication; cooperation; and a willingness to reflect upon courses of action, lessons learned from failures and successes, and interpersonal interactions improved team effectiveness (Edmondson, 2012). Cooperation between team members however, does not guarantee cooperation among teams; inter-team cooperation requires significant evidence and belief the other team will continue to contribute to mutual trust as evidenced by cooperative actions (Poepsel, Schroeder, Harris, & Liu, 2013). This precondition may be important to establish a foundation conducive to organizational transference of knowledge and high-performance best practices given the importance of trust in collaboration and knowledge sharing.

Team effectiveness: cohesion. Group or team cohesion, defined by how closely networked a team's members are (Wise, 2014), can serve as an important antecedent to team performance or effectiveness. This is particularly true when team cohesion is high due to the presence of significant trust among members (DeOrtentiis, Summers, Ammeter, Douglas, & Ferris, 2013; Sheng, Tian, & Chen, 2010). Such trust and cohesion can further encourage sharing of assets, expertise, and prospects while discouraging negative conflict and high team member turnover rates (Wise, 2014).

In their review of more than 200 studies and texts, Bruner, Eys, Beauchamp, and Côté (2013) found a strong correlation between group cohesion and team-building in sports. The authors wrote that team-building in sports is likely due to the "close proximity" (p. 31) in which members of sports teams work together "toward shared goals [to obtain] a specific outcome" (Bruner, Eys, Beauchamp, & Côté, 2013, p. 31); these

characteristics are shared by military teams. Military group cohesion is thus an example of a group cohesion sub-set that is distinguished by the measure of associated danger, including potential loss of life, the military team experiences (Siebold, 2011).

Team cohesion can improve performance, but it takes time to develop. Initial team development may be more successful in creating cohesion in the long-term if task accomplishment and clarification of roles are prioritized during the team's early days (Mathieu, Kukenberger, D'Innocenzo, & Reilly, 2015). Mature group cohesion is related positively to a team member's overall emotional intelligence, particularly his or her cognizance of his or her own feelings and emotions (Moore & Mamiseishvili, 2012). Care must be taken, however, to ensure the team's cohesion and related social network are not over-saturated by too many ties or too much trust, which can negatively affect overall team performance (Wise, 2014).

Rosh, Offermann, and Diest (2012) found that too much intimacy or interpersonal knowledge among team members might not improve team performance. Instead, teams improved team development and performance by focusing on clarification of roles and goals (Rosh, Offermann, & Diest, 2012). Similarly, cohesion may be strengthened through the development of mid-to-long-term supporting policies outlining cohesion goals; financial support to developing the necessary technological support to bring people together; a process for evaluating and updating policies; and an investment in developing a strategy which identifies goals, length of time to meet the goals, collaborative partners, and how success and failure will be evaluated and remedied as necessary (Cantabrana, Minguell, & Tedesco, 2015).

Team effectiveness: the roles of trust and interdependence. Trust is foundational to an accomplished, effective team (Edmondson, 2012; Dietrich, Eskerod, Dalcher, & Sandhawalia, 2010; Jiang & Chen, 2011; Katzenbach & Smith, 2006) and can contribute to team cohesion and team member satisfaction (DeOrtentiis, Summers, Ammeter, Douglas, & Ferris, 2013). Team members who feel safe enough to fail and learn without being judged by other members will be willing to take the risks necessary for true innovation (Edmondson, 2012). Trust also plays an important role in the team members' ability to achieve a state of inter-relatedness (Narayan & Steele-Johnson, 2012) and interdependence (Katzenbach & Smith, 2006) at which point members move seamlessly between requirements and are capable of fielding issues for absent teammates as needed. Care must be taken, however, to ensure that interdependence does not lead to high degrees of saturation between team member knowledge of specific tasks. The resulting overlap can yield inefficient use of critical, finite team resources (Mohammed, Ferzandi, & Hamilton, 2010) despite efforts to optimize cooperative goal satiation.

Social exchange theory explains this interdependence as resultant from commitments arising from consecutive events (Cropanzano & Mitchell, 2005). Team members experience these events and commitments and feel obliged to one another over time depending upon team member role and power position (Aime, Humphrey, Derue, & Paul, 2014). Team member perceptions of whether the assumptive team member's power status is legitimate affects transference of power between team members and the associated strengthening of interdependence (Aime, Humphrey, Derue, & Paul, 2014).

Dynamic experiences can lead to frequent changes in team member power, further affecting the strength of interdependence among team members (Aime, Humphrey, Derue, & Paul, 2014). Teams can mediate negative effects of power-based relationships by seeking to understand each team member's *power distance preference* (Cole, Carter, & Zhang, 2013). Teams may also attempt to adjust team leader-member/membermember dynamics to accommodate those preferences (Uhl-Bien & Marion, 2009).

Bechky and Okhuysen's (2011) ethnography of a Special Weapons and Tactics (SWAT) team and a film crew found that sufficient interdependence improved overall team responses to surprise by enabling the team members to shift roles among themselves and dynamically rearrange routines or work schedules. The key to this flexibility was team member knowledge of one another's responsibilities and significant investment in training that yielded a shared understanding of sequential and non-sequential processes and goal satiation approaches within the resource and knowledge constraints of the team (Bechky & Okhuysen, 2011). The findings suggested shared experiences and mental models strengthened team processes, responses, and overall team effectiveness (Bechky & Okhuysen, 2011). Later research emphasized the positive role of transactive memory systems (TMS), built through shared experiences and mental models, in facilitating team performance among SWAT and police tactical teams; team members can rely upon their TMS to improve performance, particularly when they are called upon to adapt to life-ordeath situations which allow for little verbal communication (Marques-Quinteiro, Curral, Passos, & Lewis, 2013).

DeChurch and Mesmer-Magnus (2010a) found that military teams, particularly, need shared mental models to enable predicting team members needs, likely next steps, and gaining synergy across their many tasks. The authors also stated that shared mental models also fostered the requisite flexibility to respond to the highly dynamic environments and situations experienced by military teams. The knowledge gained from shared mental models can improve overall team performance (DeChurch & Mesmer-Magnus, 2010a) while serving as a basis from which to develop interpersonal commitment. Similarly, *team situation models* establish a basis from which higher team effectiveness can be achieved because of the team's foundational, shared knowledge of permissible or highly desired actions and processes available to the team for use (Van der Haar, Li, Segers, Jehn, & Van den Bossche, 2014).

Team effectiveness: virtualized teams. Dynamic technological changes significantly have affected organizational dynamics (Tannenbaum, Mathieu, Salas, & Cohen, 2012), bringing together workers who may not have otherwise known one another in a traditional, face-to-face setting. Technology and distance figured prominently as one of three key themes affecting team performance or effectiveness in addition to dynamic composition and team member empowerment (Tannenbaum, Mathieu, Salas, & Cohen, 2012). The virtualized team experience, whereby asynchronous team members work towards shared goals, yields unique challenges to team effectiveness (Cha, Park, & Lee, 2014).

Virtual teams can work around the clock, aligned in their mutual desire to achieve a shared objective (Weimann, Hinz, Scott, & Pollock, 2010). The success of a virtual

team can depend upon the persistent interactions of the team's levels of technology, communication, trust, relationship-building, and leadership (Quisenberry & Burrell, 2012). Less face-to-face communication can lead to less trust among team members, but this may be mediated by the team member's perceptions of risk; if the task is low risk, less trust may be required to complete the task (Olson & Olson, 2012). To reach true team status, however, trust must be strengthened (Katzenbach & Smith, 2006).

Trust may be fostered by building connections through expertise, making and receiving recommendations, developing social capital, showing a willingness to assist others, and validating information (Morita & Burns, 2013). The use of social media, such as *Facebook*, *LinkedIn*, and *TripAdvisor*, has been shown to foster these phenomena when face-to-face interactions are not possible (Morita & Burns, 2013). Similarly, making a team member electronic profile containing basic demographic, values, expertise, and personal interest information available to other team members may improve collaboration and develop a sense of camaraderie though it is insufficient to fully address relationship conflict issues (Windeler, Maruping, Robert, & Riemenschneider, 2015).

Trust among virtual team members also relates significantly to the team's cohesion (Tseng & Yeh, 2013). Trust also may be informed by the team member's accountability and their individual commitment to outputs reflecting a level of high quality (Tseng & Yeh, 2013). A virtual team member's personality traits, such as the presence of conscientiousness, extraversion, and lower levels of neuroticism, may also contribute positively to the team's overall performance (Wang & Hsu, 2012).

Physically separated, asynchronous teams also enjoy the benefits of diverse knowledge sets (Edmondson, 2012), which address technical knowledge and can yield unique competitive advantage in understanding local market pressures, preferences, or competitors. Leaders of such teams face a different set of challenges as they work to build camaraderie between members and persistently communicate desired processes, objectives, lessons learned, identified achievements, and continually encourage team member collaboration and commitment to one another and the team's objectives (Edmondson, 2012; Weimann, Hinz, Scott, & Pollock, 2010). A virtual team's success also is informed, at least partially, by how virtualized the team is: a highly virtual team experiences significantly hindered information sharing while a lower level of virtualness among team members improves information sharing as members feel comfortable interacting face-to-face (Mesmer-Magnus, DeChurch, Jimenez-Rodriguez, Wildman, & Shuffler, 2011).

Familiarity can breed contempt, however, particularly when process or task conflict presents during early team interactions. Virtual teams that used chat were less likely to experience longer-term relationship conflict resultant from early team development stage process or task conflict than were those teams who experienced the same process or task conflicts via face-to-face or video-teleconferencing communication mediums (Martínez-Moreno, Zornoza, González-Navarro, & Thompson, 2012).

Managers are discouraged, however, from creating virtual teams to remedy relationship conflict issues among team members; these conflict issues may actually increase due to

the virtual ease of avoiding challenging face-to-face discussions (Stark, Bierly & Harper, 2014).

Virtual teams can enjoy improved sharing of unique information among members (Rentsch, Delise, Mello, & Staniewicz, 2014), however, virtual teams' practice of diminished sharing of non-unique information can negatively affect their overall performance (Mesmer-Magnus, DeChurch, Jimenez-Rodriguez, Wildman, & Shuffler, 2011). Cha, Park, and Lee (2014) found that psychological proximity, constituting social, spatial, and temporal distances, affected a team's output quality. The authors encouraged the use of workplace socialization among team members to develop stronger social bonds due to social proximity's predominating effect on all aspects of teamwork quality including communication, collaboration, coordination, and cohesion (Cha, Park, & Lee, 2014, p. 92).

Stable team composition, a sense of collectiveness, and shared transactive memory systems among the dispersed team members can ameliorate the significant challenges to team effectiveness frequently observed among virtual teams (Cordery & Soo, 2008, pp. 489-492). DeChurch and Mesmer-Magnus' (2010b) meta-analysis findings similarly indicated that shared cognition among team members positively affects a team's behavioral processes, motivational states, and overall performance. Such cognition can be measured by examining a team's shared understanding, memories, and mental approaches (Wildman, Salas, & Scott, 2014). Shared cognition can also improve team effectiveness when a team believes it is capable of meeting its goals (Collins & Parker, 2010). In nationally diverse teams, leaders were found to have a strong impact on

team success, particularly if they failed to cultivate an environment of fair treatment, honesty and respect which led to comparatively worse performance when compared to non-nationally diverse teams (Buengeler & Den Hartog, 2015).

Technology can improve a team's output and extend their availability. Choi, Lee, and Yoo (2010) found, however, that technology-based knowledge sharing did not yield discernable direct effect on team performance. The authors noted the need for effective application of shared knowledge beyond the simple act of using technology. This finding is congruent with Cordery and Soo's (2008) earlier work examining challenges to virtual teams along four major team attributes: geographic dispersion, electronic dependence, dynamic structure, and national diversity. Managers who encourage teams to collectively embrace and test the features of collaborative technology are likely to improve the actual use of such technologies, thereby also improving team performance (Maruping & Magni, 2015).

Encouraging team member commitment to the team's goals may also contribute to successful conflict management, further contributing to team effectiveness (Pazos, 2012) even though moderating for negative virtual teaming effects may be difficult. In a review of 80 quantitative studies, Ortiz de Guinea, Webster, and Staples (2012) were unable to discern moderators of negative virtual teaming effects that were generalizable to all virtual teams. The authors noted, however, that a team's longevity might overcome associated negative virtual challenges.

Kuruppuarachchi (2009) found in her case study of an Australian public sector virtual team, the need for effective support systems, early planning, and effective,

persistent oversight of the team's progress to identify and overcome challenges. Early team member involvement in developing a team's technical (functional, learning), governance (decision-making processes), and norming (group identification) practices can foster longer-term team success (Rolfsen, 2013). Such norming practices may be challenged, however, in a virtual team environment. Chen, Zhang, and Latimer (2014) noted virtual team members lack the ability to monitor one another's actions and behaviors in the same way as face-to-face teams. The authors went on to write that sharing information about individual team member performance with other members could increase each member's individual performance.

De Waal (2011) separately found that the purposeful implementation of information technology to support high-performance organizations might not immediately lead to the desired results. Visible results following implementation of such information technology may take up to three years. The implementation also may lay a foundation that might improve performance but not necessarily guarantee the organization would move to high-performance status (de Waal, 2011). This finding suggests technological solutions can help the team to communicate more easily, but may not be a panacea for improving team effectiveness.

Team effectiveness: teaming or psychological security? Allen and Hecht (2004a, 2004b) wrote that team effectiveness is better ascribed to the benefits of psychological safety than actual output. The authors challenged the belief that a team is high-performing and stated instead that such ascriptions are reflective of an assumption by those who fail to recognize the social, emotional, and competence-related benefits of

teaming (Allen and Hecht, 2004a, 2004b). Such an argument, however, does not address fully the prioritization of a shared sense of purpose in achieving the team's goals (Daspit, Tillman, Boyd, & Mckee, 2013; de Waal, 2011; Katzenbach & Smith, 1993, 2006).

Although psychological safety can foster the collaborative environment lauded as foundational to effective teaming (Linden, 2012), psychological safety alone is insufficient to address how teams overcome resource constraints and achieve high levels of output associated with high-performance. A psychological environment conducive to clear roles and freedom for team members to express themselves also provides the security necessary to encourage high-performance (Spink, Wilson, Brawley, & Odnokon, 2013). As noted earlier, cognitive diversity may suffer due to time and overexposure among team members (Franck, Nuesch, & Pieper, 2011). This suggests that psychological safety as a singular determinant of team effectiveness may fail to encourage the innovation frequently associated with HPTs (Katzenbach & Smith, 2006).

Team effectiveness: the role of conflict. Conflict can facilitate or impede effective teaming (Edmondson, 2011a; Edmondson, 2011b; Ehie, 2010). Conflict may be related to differences in approaches to process, task, or interpersonal relationships (de Wit, Greer, & Jehn, 2012). Ehie (2010) found support for earlier studies distinguishing between the negative effects of affective conflict, whereby interpersonal differences lead to negative impacts on the quality of decisions, and cognitive conflict, whereby task completion and shared sense of purpose is negatively affected. While HPTs frequently experience cognitive conflict without detriment (Ehie, 2010), affective conflict can

significantly affect the team's output regardless of how simple or serious the process or task at hand may be.

Conflict may also arise from team member perceptions of other members' abilities and effort levels (Gupta, 2012). Team members who possess high ability but show low levels of effort and contribution are likely to experience more team-level conflict than those members who possess low ability but exhibit high effort (Gupta, 2012). This suggests an opportunity to reduce conflict exists if all members at least try to contribute, even if their abilities are insufficient to meet the task assigned.

Task conflict, particularly, has the potential to improve overall performance in some teams because its emergence and identification encouraged the team to clarify task-related ambiguities (O'Neill, Allen, & Hastings, 2013). Despite the improvement in overall performance, improved innovation may not be observed among teams experiencing task, relationship, or process conflict, according to a recent meta-analysis of team conflict that examined 83 related studies (O'Neill, Allen, & Hastings, 2013). Task conflict was found to be more helpful during early task planning stages than during actual execution (O'Neill, Allen, & Hastings, 2013).

Bang and Park (2015) found in their study of 171 South Korean work teams that the presence of conflict within a team could negatively affect the team's perception about its own performance, even if the performance itself is not negative. The authors suggested managerial introduction of measured levels of task conflict could refocus the team sufficient to overcome the negative effects of interpersonal conflict (Bang & Park, 2015). The presence of too much team-based knowledge of a specific issue, however,

was found to contribute to increased confrontation particularly when individual members deviate from the group's collective baseline of shared knowledge on an issue (Frings, Hurst, Cleveland, Blascovich, & Abrams, 2012).

Conflict also may lead to opportunities for team members to connect with others by offering different perspectives and translating cultural differences, or by affording management an opportunity to discuss how members can integrate to enable positive shared reliance upon one another (Edmondson, 2012). O'Neill, Allen, and Hastings (2013) differentiated between conflict centered on tasks, interpersonal relationships, and process. Constructive conflict can improve interpersonal dynamics and overall team performance if well managed (Gabris & Nelson, 2013; Henttonen, 2010; O'Neill, Allen, & Hastings, 2013) and if trust is present among team members (Tiejun, Wenjun, Xin, & Dianzhi, 2013). Left unchecked and without remedy, the emotional underpinnings of relationship conflict may lead to escalating conflict which ultimately affects performance (Opute, 2014).

Too much conflict may erode a team's potency and affect overall performance (O'Neill, Allen, & Hastings, 2013). Mediation of team-based conflict may be affected positively by building an environment that encourages freedom of expression, sympathetic understanding of other team members' perspectives, or informed risk taking (Yuan & Jing, 2014), yielding a sense of team empowerment. Such practices develop over time through shared experiences and team evolution.

Team Evolution

Growth models used to explain a team's development focus on the various junctures along a team's experience (Humphrey & Aime, 2014). Tuckman's (1965) model is perhaps the most widely known rendition of team evolution and includes several stages: forming, storming, norming, and performing. Later, Tuckman & Jensen (1977) added another stage: adjourning. The Office of Naval Research's early sponsorship of Tuckman's (1965) original work suggests the DoD has long recognized the importance of understanding group dynamics over time to promote team effectiveness (Bonebright, 2012). While they are forming, teams can foster positive "developmental space" (Derksen, Caluwé, & Simons, 2011, p. 253) through planning for shared future outcomes, reflecting on team experiences, organizing team processes and goals, and communicating together; such developmental space was found to positively impact team outcomes (Derksen, Caluwé, Rupert, & Simons, 2014). Goodall (2013) found training focused on effective team development, however, is neither desired by team members nor necessary to achieve HPT characteristics.

Whatley (2012) envisioned a two-phase model comprised of separate self-sacrifice and a self-growth phases. The initial phase centers on personal development by movement through states of observation, helping others grow, collaborating for the collective good, and hearing others (Whatley, 2012). The second phase incorporates key factors important to team development, such as visualization, conceiving opportunities, influencing, respectful care and use of team resources, and recovery (Whatley, 2012).

The two phases address micro-dynamic, individual team member issues (Humphrey & Aime, 2014) and dynamic group development issues (Bonebright, 2012).

Managers can use team development models as useful frameworks, but the models fail to explain fully how related transitional experiences between stages affect team dynamism (Bonebright, 2012). This suggests that teams are not bound fatally to disruptive processes, but can employ practices to help transition smoothly through the evolutionary stages. The natural evolution of a team ultimately incorporates important experiences, such as clarification of and agreement upon shared goals, identification of performance measurements, the shaping of processes and group norms, the building of foundational trust, and the development of commitment to the team and the organization or entity which benefits from the team's collective efforts (Bonebright, 2012; Castka, Bamber, Sharp, & Belohoubek, 2001).

From failure, phoenixes. It is important that teams be allowed to fail. A team that never fails may simply be a team that has never truly pushed its boundaries (Edmondson, 2012). Failure offers teams an opportunity to learn from the event itself and from one another (Edmondson, 2011a). Team members build trust and a sense of security or cohesion through jointly held memories, including small failures so long as they do not permanently cripple a team's efficacy (Edmondson, 2012). Group efficacy and coping strategy training can improve team performance as they discuss shared impressions of emotional events (Petitta, Jiang, & Palange, 2015), arguably failure among them.

Resolving shared failures offers shared paradigm shifts, early cautionary signs of an errant path (Edmondson, 2011a, 2012), learning experiences, and anecdotes that can serve as touchstones in a team's collective memory. There is a limit, however, to purposefully building shared cohesion through shared experiences. The more a team shares experiences, the more its effectiveness can be muted over time by a diminishing return on its original cognitive diversity (Franck, Nuesch, & Pieper, 2011).

Even when teams are motivated to perform well, they may fail during periods of significant pressure due to over-dependence upon general knowledge and expertise instead of relying upon the unique competencies and knowledge of the team members (Gardner, 2012b). This paradoxical outcome partially is attributable to a propensity for a team experiencing high-pressure contexts to seek group consensus, focus on shared knowledge or output completion instead of learning, and conform to any preexisting group hierarchy (Gardner, 2012b). The findings suggest the need for a team to challenge its processes and assumptions continually so that the team collectively deters regression to groupthink (Edmondson, 2012; Johnson & Johnson, 2013).

Teams suffering from groupthink may experience negative team outcomes. Groups observed in a game-based simulation environment have been found to eliminate opposition faster than individuals (McPherson & Parks, 2011), suggesting individuals alone may consider the consequences of action more thoroughly than when these same individuals are in a group dynamic in which they do not have sufficient time to consider alternatives or feel they cannot voice dissent against the group's preference(s). Individual team members who strongly identify with the team have been found more

successful in deviating from potentially negative group norms than weaker members, suggesting stronger members may be in a better position to challenge groupthink (Täuber & Sassenberg, 2012). Team member identification at the group level within a larger group, such as a sub-team within an organization, also has been found to positively influence team member interactions, bonds, and interdependence (Ozeki, 2015).

Failure: the role of team member personality. The interactions of team members' personality traits also may lead to conflict; strong personalities can reduce a team's ability to adapt to changing situations (Arnulf, 2012). The average of a team's Secondary Psychopathy, measured by how much a team's members are impulsive, irresponsible, and experiences interpersonal difficulties, was found a positive predictor of overall team task performance (O'Neill & Allen, 2014). Constructive conflict due to a team's interpersonal interactions, however, can improve team learning (Decuyper, Dochy, & Van den Bossche, 2010) and positively affect team performance provided the organization supports the time and potential intervention required to work through such conflicts.

Failure: the role of organizational environment. Some forms of failure, such as the micromanagement experienced by centralized control, could lead to a team's demise (Ray & Bronstein, 1995). Failure to achieve positive conflict resolution may also yield a negative organizational environment (Edmondson, 2012). Such an environment could also lead to a team's demise through ruptured trust or negative team member interactions (Edmondson, 2012).

Some teams may have a shared concept of how to deal with challenges or failure, thus enabling further learning within the organization (Cannon & Edmondson, 2001). Managers can encourage continuous learning to predispose teams toward exploitative and exploratory practices, building upon known processes for improvement and developing innovative solutions respectively (London, 2013; Rodriguez & Hechanova, 2012). Cannon and Edmondson (2001) wrote that teams whose members were risk-takers and able to own up to mistakes rather than concealing them have a stronger chance of learning from failure, particularly when they productively examine perceived failures, conflicts, or disagreements.

In a study of an organization's 51 work groups, including self-directed teams, the authors found a great deal of variance across the teams' approach to and attitudes toward failure (Cannon & Edmondson, 2001). Those teams who had a mutual appreciation of the utility of learning from mistakes improved group performance. Edmondson (2012) offered a continuum by which leaders could be guided for which types of failure should be encouraged and which should be rectified. Figure 2 examines this range.

Blameworthy

Praiseworthy

Deviance

Violation of policy, practice, or process.

Inattention

Accidental deviance.

Lack of Ability

May reflect a lack of expertise or knowledge

Process Inadequacy

Competence is present, but process is inadequate or undeveloped

Task Challenge

The task is so complex it routinely cannot be replicated properly

Process Complexity

A multifaceted process that cannot withstand simple agitations **Uncertainty**

The unforeseen affects outcomes, steady actions taken are not untoward but still cause unwanted results

Hypothesis Testing

Failure in the name of striving when successful outcomes are anticipated

Exploratory Testing

Innovation leads to unsuccessful experimentation focused on testing a premise

Figure 2. Edmondson's (2011a) continuum suggests that some failures deserve praise; others warrant corrective attention. Adapted from "Strategies for Learning from Failure" by A. C. Edmondson, 2011, *Harvard Business Review*, 89(4), p. 50. Copyright 2011 by Harvard Business Publishing. Adapted with permission.

Edmondson (2012) stated that the key to identifying how to treat failure lies in the type of failure observed. The author encouraged failures that expanded the team's collective experience and knowledge base (Edmondson, 2012). Those mistakes that could have been prevented warrant team scrutiny to learn how to avoid them in the future (Edmondson, 2012). Complicated failures comprised of many parts, processes, or people may be difficult to examine successfully to the degree necessary to prevent significant negative outcomes (Edmondson, 2012). Mitigation strategies in such failures can include

rewarding the reporting of such failures and protection for those who choose to speak out (Edmondson, 2012).

Teams in Organizational Context

An organization's environment can affect the organization's and its related teams' collective performance (Shafritz, Ott, & Jang, 2011). An organization's leaders can also affect a team's performance, particularly if they do not align with team member perceptions of the type of leader the group needs (Leicht, Crisp, & de Moura, 2013). Effectively adjusting one's leadership approaches demands a degree of trust between leader and affected organizational members (Abbott & Bush, 2011; Quisenberry & Burrell, 2012).

Similarly, organizational context can contribute to a positive correlation between shared leadership and team proactive behavior that yields greater output. Bureaucratic organizations have been found to deter the positive correlation while supportive organizations contributed positively to shared leadership and team proactive behavior (Erkutlu, 2012). This is further reinforced by team members' perceptions they offered input valued by other team members, shared responsibility, and collectively committed to team goals (Erkutlu, 2012). All of these characteristics contribute to encouraging team-level trust.

Organizational context includes recognition of the role of trust (de Waal, 2011). The level of trust among an organization's leaders and subordinates can affect the organization's performance (Allen & Hecht, 2004a, 2004b; de Waal, 2011), not unlike how team-level trust can diminish team effectiveness when differences in team member

propensity to trust one another are present and contribute to reduced overall trust (Ferguson & Peterson, 2015). Managerial competence positively affects organizational trust; organization trust can contribute positively to employee morale and desired levels of effective team process and performance (Marin-Garcia & Poveda, 2010). These findings also extend to the public sector (Fard, Ghatari, & Hasiri, 2010; Fard, Rajabzadeh, & Hasiri, 2010).

In a study of public sector organizations' senior management, Albrecht and Travaglione (2003) found the organization's environment affected trust more than personality-dependent or other demographic factors. The authors confirmed several important antecedents leading to trust in senior management including procedural fairness, organizational support, security, and communication, all of which contributed to performance (Albrecht & Travaglione, 2003). This trust further was found to correlate positively with an employee's affective commitment to the organization as well as his or her continuance commitment, openness to change, and turnover intention (Albrecht & Travaglione, 2003)—characteristics that de Waal (2011) noted were critical to creating high-performing organizations.

Separately, leaders who exhibited fairness were able to build trust even if they did not meet the group's prototype of a desired group leader (Seppälä, Lipponen, & Pirttilä-Backman, 2012). Relying solely upon being the type of leader the group assesses it needed (its prototype) may not be a substitute for the presence of leader fairness (Seppälä, Lipponen, & Pirttilä-Backman, 2012). Even if an HPT itself is not affected immediately by turnover, the distraction of an organization in managerial turmoil can

affect the team's overall purpose as the team adjusts to the compensate for low-trust issues.

Cultivating an environment that supports teaming may require organizational change informed by Lewin's (as cited in Shafritz, Ott, & Jang, 2011) classic three phases of change—unfreezing, movement, and freezing. Alternatively, organizations may employ a four-phase model of change: realization of a need for change followed by planning, implementing, and sustaining the change (Erwin, 2009). Such change is best affected among public sector organizations by, principally, creating a group of supervisory leaders who can guide efforts and outcomes (Cunningham & Kempling, 2009).

Other factors of effective change include ensuring sufficient structural support to manage the change (Ford, 2009). Addressing resistance to change; communicating the need for and expected results of the change; planning for the change and associated persistent development; refreshing existing processes and frameworks to support the desired end-state; and overseeing the change through accessible and visible management (Cunningham & Kempling, 2009) are similarly useful in managing change. While smaller organizations frequently are thought to be able to adapt readily to change due to their small numbers, they must still ensure attention is paid to establishing a formalized construct to oversee purposeful and successful change (Ford, 2009).

Teams in organizational context: process or innovation? Organizational change also may lead to questions surrounding a team's focus on static or innovation-driven opportunities. Edmondson (2012) urged teams to focus on improving efficiency if

they worked in organizations where process uncertainty was low. Team member tolerance of uncertainty relative to the overall group's level of uncertainty avoidance may also affect performance, particularly if the two are misaligned (Pierro, Sheveland, Livi, & Kruglanski, 2015). Where teams experienced high uncertainty or limited knowledge, teams had an opportunity to pay attention to opportunities for breakthrough (Edmondson, 2012). It is not clear, however, whether such an approach works across all federal-level, public sector teams. Innovation-driven teaming in the private sector leads to new competitive advantages (de Waal, 2011), but public sector managers may find the costs typically associated with such experimentation difficult to justify, particularly during periods of budget concerns.

Further complicating the decision to focus on process or innovation are military operations, which may be hybrid with portions of the organization process-focused and others more aligned with innovation and discovery. For example, payroll is an aspect of a routine process (Edmondson, 2012). Military missions, however, are complex.

Developing strategies for maintaining peace could be considered a form of innovation because military teams must respond to dynamic operational conditions even as endstates (a return to stability) and goals (preserving the safety of troops and the local population) remain relatively static. Although numerous anecdotes highlighting military teams' ability to innovate in dire circumstances have been captured in the popular literature (Ambrose, 2001), ensuring an environment for persistently innovative approaches may be challenged by fiscal constraints and high workforce transience, which also affect the composition of a team.

Challenges to Successful Teams

Small teams may be affected by numerous constraints and issues, such as persistent availability of the right mix of team member experience and expertise, organizational commitment to the team's evolution and requisite resource needs, and an allowance for team learning (Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 2006). Edmondson (2012) identified several challenges to effective teaming, including team members' dispositions; the nature of the team's leader(s); resource allocation; the presence of a distinct and collective goal; and other organizational factors, such as organizational approaches to rewarding employees. Hierarchical, highly stratified bureaucracies with incentive programs that do not promote positive team experiences and outcomes add to an already complex path to team success (Edmondson, 2012). Such constructs fail to yield the sense of obligation, longevity, and permanence (Abbott & Bush, 2013) encouraged for effective HPTs.

Challenges to public sector teams. Although many public sector employees may welcome the use of teams in public sector organizations, public sector teams may be further challenged by policy subsystems. This includes the competing forces of public sector organizations, lobbyists, and congressional-level sub-groups (Blair, 2001) that may affect a public sector agency's and its sub-teams' performance. These entities contribute to the gridlock often cited as reducing overall public confidence in public sector capacity to operate effectively (Steinhauser, 2014).

In their two-year ethnographic case study of an England-based defense contractor, Castka, Bamber, Sharp, and Belohoubek (2001) sought to examine what challenges the

contractor faced enacting and constructing HPTs. Based on their extensive review of the literature, the authors categorized aspects affecting successful HPT execution into two sets of factors: system and human (Castka, Bamber, Sharp, & Belohoubek, 2001). System factors included any interface with nonorganizational outlets as well as the contractor's own goals, and performance metrics (Castka, Bamber, Sharp, & Belohoubek, 2001). Human factors included requisite expertise fostered by collaboration, individual enablement, innovation, faith and confidence in one's co-workers, and mutual agreement (Castka, Bamber, Sharp, & Belohoubek; 2001). The authors found that the team's evolution to high-performance was affected by interpersonal differences and approaches to leadership and process oversight even though a focus on clearly defined and realistic goals contributed to successful teaming (Castka, Bamber, Sharp, & Belohoubek, 2001). This finding aligns with de Wit, Greer, and Jehn's (2012) caution on the detriments of relationship-based conflict.

Challenges to successful teaming: word and deed. Lam, Van der Vegt, Walter, and Huang (2012) separately wrote that team members' collective or individual negative actions could harm overall team performance. Aubé and Rousseau (2011) earlier noted this impact when they found that aggressive behavior among team members negatively affected team performance. The authors found that focusing on commitment to the team's goals helped to refocus the team sufficiently to overcome the adverse affects of individual poor behavior (Aubé & Rousseau, 2011).

Gardner (2012a) found that although good teams frequently have the necessary resources to deal effectively with pressure, they actually stop employing these skills well

when pressure becomes excessive. In her long-term study of more than 600 members of 100 teams (Gardner, 2012a, p. 91), Gardner found increased pressure actually encouraged a reversion to hierarchical traditions. This curious phenomenon limits team success by its inadvertent encouragement to rely on past successful benign, staid resolutions instead of enabling an atmosphere of acceptance for new information and suggestions of new solutions (Gardner, 2012a). Team member accountability figured prominently as the solution to Gardner's (2012a) identified propensity for team members' avoidance of pressure leading to risk aversion. Identifying goals; the knowledge, skills, and steps to achieve them; and addressing knowledge or experience deficiencies enable a discussion with team members that is structured by pre-set milestone and accountability check-up sessions (Gardner, 2012a).

Similar to Pentland's (2012) connector, Gardner (2012a) noted the need for a connector between team members who is also capable for empowering every member to contribute the breadth of their potential. This connector acts as a critical referee of sorts, not unlike Belbin's (2011) coordinator. Many team members can achieve high levels of performance even when situations are perceived as high-pressure. If the project is perceived by members as being too big to fail, however, the tendency to drown out innovative voices is increased as pressure builds to prioritize the project's protection from all possible failures instead (Gardner, 2012a). Such a negative environment can be avoided by ensuring all members have a voice, the coordinator enables the team to stay on track, explore new options, and press through the discomfort of risk aversion owing to mounting pressure(s) (Belbin, 2011; Gardner, 2012a; Pentland, 2012).

The ability to remain cohesive in the face of external pressure was identified by Gardner (2012a; Gardner, 2012b) as a critical skill for effective teaming. This elusive cohesion and ability to achieve optimized output leave HPTs with a reputation of being truly rare (Castka, Bamber, Sharp, & Belohoubek, 2001; Johnson & Johnson, 2013; Katzenbach & Smith, 2006; Rosh, Offermann, & Diest, 2012). Such rarity, however, can lead effective HPTs to marginalize others within the organization, whether through ingroup favoritism or through external observation of a team working more capably than other comparable organizational teams. When companies continually laud high-performing groups' efforts, they can either inspire others to emulate or compete with the HPT's performance (de Waal, 2011) or inadvertently discourage fledgling attempts to overtake the high-performing juggernaut (Carboni & Ehrlich, 2013; Lam, Van der Vegt, Walter, & Huang, 2011).

Challenges to successful teaming: organizational obligations. As previously noted, team and organizational commitment can influence a team's ability to achieve high-performing status (de Waal, 2011; Katzenbach & Smith, 2006). The team itself will require help, likely from another team. While an innovative team may be able to dream of how to put a man on the moon, an equally important support team will ensure the facilities are in good order, salary pay is processed, and necessary supplies are ordered and delivered to the team on time (Edmondson, 2012) and that effective human resource practices and polices are implemented purposefully, even in the public sector context (Currie & Procter, 2003).

Self-governing teams frequently innovate and create value (Denning, 2010). Too much team independence from other organizational teams and entities, however, can negatively affect overall performance because the team's ability to capitalize on external knowledge diminishes (Haas, 2010). Henttonen (2010) separately identified the need for additional empirical evidence to determine a more precise correlation between a team's social network and its effectiveness. Mapping a team's network may improve effectiveness, however, by facilitating management intervention of conflict resolution through remedies based on comprehensive understanding of the team and nodes within the network that can strengthen cooperation (Wu, Wu, Xie, & Lu, 2015).

Other Theories that Inform Effective Teaming

Teams do not operate in an organizational vacuum. Managerial oversight, individual motivation, or how a team and its composite members are rewarded can affect a team's performance. Leadership, motivation, and social exchange theories collectively address types of leadership, nature of motivation and reward, and leader-member interactions.

Leadership theories. HPTs often operate without a hierarchical leader in the traditional organization theory sense (Katzenbach & Smith, 2006). Instead, team members adopt various roles, including procuring resources and addressing various administrative requirements. This dynamic can shift over time and situation in HPTs (Katzenbach & Smith, 2006). The team members' levels of commitment to the group may require various leadership approaches as the individual's role assumes subservience

to the team's overall goals and achievements (Edmondson, 2012; Johnson & Johnson, 2013).

Theorists have long examined whether leadership could be attributed to position, traits, or behavior (Bedeian & Hunt, 2006). More recently, servant leadership approaches whereby the leader prioritizes the team's needs over his or her own needs were found to contribute to team effectiveness, particularly when goals and processes were defined clearly (Hu & Liden, 2011). Authentic leadership, whereby a leader develops a positive, ethical, and transparent environment conducive to one's personal development, has also been found to facilitate group success (Rego, Reis Jr., & Cunha, 2015).

Leadership theories: types of leaders. Leadership responsibilities may fall into one of three broad categories: transactional, transformational, or contextual leadership (Anantaraman, 1993). Transactional leadership reflects the basics of leader-member exchange theory, whereby two people interact based on perceived costs and benefits (Uhl-Bien & Marion, 2009). Transformational leadership may be required to encourage organizational support for high-performance teaming given the transformational leader's propensity for cultivating vision, the charisma routinely required of innovative and change-seeking leaders (Anantaraman, 1993), and the positive in-group tenor necessary for encouraging proactive team behavior (Wu & Wang, 2015). Transformational leadership can also contribute positively to individual team members' job satisfaction rates and overall team performance while cultivating an environment of trust (Braun, Peus, Weisweiler, & Frey, 2013). Contextual leadership can contribute to overall team empowerment by adjusting from a person-focused type of leadership for client-related

teams to a more task-focused leadership role for project-based teams (Tuuli, Rowlinson, Fellows, & Liu, 2012).

Uhl-Bien and Marion (2009) wrote that complex leaders possess a future orientation and optimize conflict by creating a shared understanding from which team members can grow and innovate. Charismatic leaders can inspire followers to forego personal needs for the sake of the team or its overall purpose and goals (Anantaraman, 1993). The contextual leader will be able to adjust to challenges faced by the team because although the leader's style of leadership may change to reflect changes in the environment, the leader's commitment to positive interactions and support to the team remains firm (Anantaraman, 1993). Charismatic or servant leadership practices among private or public sector HPTs potentially also includes combat teams in the DoD (Ambrose, 2001) and can yield exceptional performance while motivating followers toward selfless, vice self-motivated, service (Yammarino, Mumford, Connelly, & Dionne, 2010).

Leader adaptability, particularly through periods of organizational change, is a fundamental skill of today's work environment (Christian, 2010; Uhl-Bien & Marion, 2009). In a survey of 150 Indian manufacturing firms, which included public sector firms, Bhat (2010) found proactive management of continuity as well as change were important to a firm's innovation and competitive success. Accepting the argument that HPTs largely are comprised of self-leaders (Katzenbach & Smith, 2010), the self-leader's capacity to respond promptly to a changing environment is thus important (Uhl-Bien & Marion, 2009).

Leadership theories: a matter of style. Andersen (2010) similarly found distinctions between public sector officials and private sector managers' leadership, decision-making, and motivation styles. The author determined public sector officials predominantly were change-oriented in leadership style and achievement motivated while private sector managers predominantly were relationship oriented in leadership style and motivated by power (Andersen, 2010). Both sectors' managers basically shared an intuitive approach to decision-making. The findings suggest a public sector managerial openness to change (Andersen, 2010). This view contradicts Wilson's (2000) classic view of government leaders as being challenged by constraints, compliance, and, in some cases, Congress. Wilson's (2000) seminal argument suggests liberating leadership in which innovation and freedom of thought are encouraged may be difficult to holistically and persistently nurture in the public sector.

Leadership theories: context, shared. Yammarino, Mumford, Connelly, and Dionne (2010) found that military teams in hazardous or life-threatening, severe situations performed best when the leader's approach took into account how many members of the team were affected. The authors wrote that a pragmatic approach was best suited at the individual level. Individualized leadership was best suited for two-person situations, and shared leadership best suited team-level interactions (Yammarino, Mumford, Connelly, & Dionne, 2010).

Shared leadership can also reduce conflict while improving unity, trust, and cohesion, particularly when compared to teams without shared leadership experiences (Bergman, Rentsch, Small, Davenport, & Bergman, 2012). Shared leadership especially

benefits team effectiveness when the team's members sense they share a purpose, enjoy social support, and enjoy an internal team environment characterized by collaboration and positive communication (Daspit, Tillman, Boyd, & Mckee, 2013). Shared leadership was found also to contribute positively to team performance among knowledge-based teams (Fausing, Jeppesen, Jønsson, Lewandowski, & Bligh, 2013) and among multicultural team members (Herbert, Mockaitis, & Zander, 2014).

Shared leadership may not be appropriate for all contexts. Cross-functional team composition is best when it is formed from both personality and technical expertise considerations (Molleman & Broekhuis, 2012). Shared leadership among cross-functional teams may be difficult to achieve, however, because different team members respond differently to the cross-functional team environment based on their personality (Molleman & Broekhuis, 2012). Emotionally stable team members were observed informing others of their decisions less than lesser-emotionally stable team members (Molleman & Broekhuis, 2012). This practice belies the transparency typically ascribed to effective shared leadership dynamics.

In a separate study of military members, Young and Dulewicz (2008) found high-performance among military members likely was predicted by the individual's concerted effort to optimize fully his or her competencies. Military leaders particularly were successful when they displayed a calm demeanor; were in control of the situation; were emotionally resilient, self-aware, critical thinkers; conscientious and sensitive to others' needs (Young & Dulewicz, 2008). Although military teams in dangerous situations are a small subset of broader public sector teaming, the encouragement to adjust leadership

styles to address contextual dynamics is consistent with the literature (Johnson & Johnson, 2013).

Leadership theories: impacts of effective leaders. Andrews and Boyne (2010) hypothesized public sector management capacity, including effective leadership, could positively affect performance. In their examination of the results of England's annual comprehensive Performance Assessment conducted by the Audit Commission, the authors found governments operating at a higher level increased their capabilities compared to governments whose performance was considered low (Andrews & Boyne, 2010). The authors also found that effective leadership improved capacity and encouraged policy makers to foster high-performing operational and effective leadership efforts (Andrews & Boyne, 2010). Specifically, leaders who are given liberty to make the best possible use of all available physical, fiscal, and personnel resources are likely to achieve high-performance outcomes (Andrews & Boyne, 2010). Such approaches could overcome the scant, noninsightful, subjective, and often inconsistent performance measurement data on public sector output (Andrews, Boyne, & Walker, 2011; Barlage, Van den Born, Van Witteloostuijn, & Graham, 2014).

Similarly, Braun, Avital, and Martz (2012) found that action-centered leadership practices that considered the intersection of the task, the collective team, and the team member could improve team outcomes (p. 176). Building upon Adair's (1973, as cited in Braun, Avital, & Martz, 2012) earlier findings, the authors encouraged practitioners to cultivate a team dynamic in which team members enjoyed an environment conducive to individual learning, fostered collaboration among other members, and reconciled

individual performance with job satisfaction. The action-centered leadership model, comprised of task management, team efficacy that cultivated a shared sense of purpose and belief in the team's ability to meet goals, and support for individual autonomy (Braun, Avital, & Martz, 2012, p. 181), provided a guide for practitioners seeking to balance team and individual need.

Motivation theory. Rewarding team members for their contributions must be balanced carefully with ensuring they remain motivated to continue contributing to the team and its overall goals. Managers can conscientiously mentor and place team members who outperform their teammates in a central role within the team, thereby improving team performance through the top performer's positive and disproportionately higher output and influence on the team (Li, Zhao, Walter, Zhang, & Yu, 2015). Individually rewarding a "superstar" (Nihalani et al., 2010, p. 500), however, can lead to erosion of the team's collective sense of self or collaboration. Conversely, persistently recognizing the team as a unit can discourage or even marginalize the individual (Gardner, 2012a; Johnson & Johnson, 2013).

Rewarding an HPT's successes is often best accomplished by recognizing the collective group as a single unit, but also by recognizing individual team members separately in a way meaningful to the individual team member (Nelson, 2010). Chen and Bozeman (2013) found that public sector managers, in part, were motivated by a sense of service. The public managers' motivation to work, however, was negatively affected by a lower level of self-determination relative to nonprofit managers (Chen & Bozeman, 2013). Ultimately, a combination of both individual and team incentives can improve

team performance; the measurement of that improvement and its commensurate repetition over multiple offerings of the incentive, however, are illusive and not guaranteed (Blazovich, 2013).

Social exchange theory. An individual's position and relative power can affect their interactions (Emerson; 1976). Mediating interpersonal power imbalances, particularly among team members, is dependent upon either increasing the less powerful team member's options, decreasing the more powerful team member's options, decreasing the overall value of the interaction or exchange for the less powerful team member, or increasing the overall value of the interaction or exchange for the more powerful team member (Aime, Humphrey, Derue, & Paul, 2014). Shifts in power within decentralized HPTs can occur frequently. To be truly optimized, team members must view the power shifts as legitimate (Aime, Humphrey, Derue, & Paul, 2014).

HPTs

Katzenbach and Smith's (2006) framework showed a shared link to a purpose or mission, balanced diversity, interdependence, effective communications and innovation, and mutual accountability are foundational to an HPT's success. Ray and Bronstein (1995) noted measurable goals were the most important aspect of effective teaming. Commitment (Eggensperger, 2004) and communication (Pentland, 2012) were also identified as key components of HPTs. Patience may also be required to afford the time necessary for a team to coalesce properly around a problem and show effectiveness in the desired outcome areas (Abbott & Bush, 2013; Marsh, 2010).

HPTs also require organizational support. The organization must ensure a sound organizational construct that addresses pay, rewards, and training, among other teamspecific enablers (Edmondson, 2012). The team also needs agile support systems that flex to provide team-focused support vice a hierarchical, controlled approach (Ray & Bronstein, 1995). Other infrastructure, such as effective Information Systems designs or technological structures that enable quick and easy retrieval and integration of information, can contribute to effective team collaboration, capacity to absorb new materials, and the ability to field emergent issues (Zhang, Venkatesh, & Brown, 2011). As noted earlier, proactively managed technological solutions can also encourage effective communications among team members.

HPTs: patterns of excellence. High-performing team members communicate in unique patterns measured by vigorousness, level of commitment, and collaboration between individual team members, as a team, and with other teams (Pentland, 2012). By using electronic collection devices attached to approximately 2,500 people in more than 20 organizations over a seven-year period, Pentland (2012) observed patters of interaction, such as the communication styles between team members, tone of voice, nonverbal communication patterns, length of interactions, and, critically, how the members interacted outside the formality of structured meetings. The author ultimately identified several key traits shared by effective teams:

- All team members offered succinct and relatively equitable inputs as measured by length of input and time spent listening;
- nonverbal cues were spirited and expended face-to-face;

- interpersonal connections were made across the team, rather than a traditional hierarchical, leader-follower dynamic;
- strong communications continued off-line, outside formal meetings or structured settings; and
- new information was injected into the team's knowledge base by the team
 members' exploration outside the team experience followed by their sharing
 of newly acquired knowledge with other team members (Pentland, 2012).

HPTs: society and humor. Pentland (2012) found that socialization should be focused on work-time events, such as shared breaks or the ability to bond over lunchroom discussions, rather than less focused events (Pentland, 2012). Similarly, Fruhen and Keith (2014) found that reinforcing a team's understanding of the task at hand through purposeful socialization yielded greater desired team-based results than team-building events solely focused on improving social cohesion among team members. Pentland (2012) similarly found that after-hour social engagements also did not necessarily create better interpersonal communications among team members. Virtual, textual communication methods, such as emailing and texting, contributed the least to effective communication partly because of the impact such communications have on the team's limited energy reserves (Pentland, 2012).

The challenge of improving these interpersonal communication efforts lies in achieving the right balance. Communication and socialization figured strongly in Katzenbach and Smith's (2006) concept of HPTs. Gockel and Kerr (2015) found that the use of humor at a non-group-member's expense did not necessarily build personal

commitment to the team and was not a reliable indicator of improved social cohesion among the team because humor is subjective and can be interpreted by the individual as less funny or even hostile than the person trying to employ it intended. Over-communication can stifle productivity in the same way under-communication can (Pentland, 2012).

HPTs: not necessarily an antecedent to high-performance organizations. Simply encouraging high-performance teaming does not yield a high-performance organization (de Waal, 2007). Managerial articulation of such expectations may set a stage that encourages workers to identify and aspire to use of best high-performance organization practices (Boedker et al., 2011). Identifying an organization's professed values, ensuring alignment with the employees' individual values, and making them available to internal and external audiences and stakeholders similarly contributes positively to desired performance (James, 2014).

Akdemir, Erdem, and Polat (2010) wrote that the literature lacked an agreed-upon definition of what constitutes organizational high-performance. The authors also wrote that the definition was as varied as the academic disciplines of the authors who contributed to the discussion (Akdemir, Erdem, & Polat, 2010). Instead, an organization's ability to achieve high-performance levels depended in part upon contextual matters, such as the organization's objectives, concerns, and personnel expertise (Akdemir, Erdem, & Polat, 2010). Akdemir, Erdem, and Polat (2010, pp. 157-171) subdivided these broad categories into 26 subcategories, many of which align with aforementioned high-performance teaming characteristics. An adapted list includes

- a clearly comprehended vision and shared values;
- holding people accountable;
- well-defined goals;
- excellent interpersonal and organizational communication;
- trust that encourages interdependence;
- socialization and fun;
- decentralized decision-making, preferably at the lowest level;
- training that improves performance;
- feedback that can be acted upon;
- exemplary focus on the customer;
- metrics for measuring output across all organizational levels;
- managing change purposefully and well;
- embracing innovation;
- being a part of a team;
- shared leadership;
- an incentive system that includes team awards;
- identifying and retaining the best employees possible;
- maintaining balance between work and nonwork priorities;
- intellectual, experiential, and interpersonal diversity;
- rewards that satisfy motivational needs;
- compensation and appraisal programs that encourage effective performance;

- effective sharing of knowledge;
- purposeful work, good workplace conditions, career opportunity, and empowerment;
- preparing employees to assume greater responsibility as people leave or retire;
- continually addressing organizational opportunities and threats;
- ethics-based practices and respecting one another.

The exhaustive list may appear daunting, but committing to improving in these areas can create a high-performance environment that will support effective teaming (Akdemir, Erdem, & Polat, 2010).

Examples of Public Sector Teams

A general lack of confidence in public sector capacity for high-performance output (Steinhauser, 2014) and increasing budget constraints (Carter, 2013; Hagel, 2013; Sisk, 2015) contribute to questions about whether effective public sector teaming exists. This section reviews poor examples of public sector teaming. Examples of effective public sector teaming are also highlighted.

First, the failures. The damage wrought by Hurricane Katrina in Louisiana in 2005 serves as an example of broad public sector failure at the combined federal, state, and local levels. The George W. Bush Administration reviewed the events (Townsend, 2006) and found traditional expectations of disaster response, communications, and organizational contexts contributed to the ineffective preparation and immediate poststorm response. Local and state government disaster response efforts took primacy with the federal government taking a supporting role (Townsend, 2006). This position was

insufficient to affect the appropriate federal response requirements to field the largest, most dangerous weather event in the United States (Townsend, 2006, p. 5).

Coordination and communication between the three levels of government failed to overcome initial post-disaster response needs (Townsend, 2006). Seventeen critical challenges were identified requiring various levels of government to address how they would improve collective disaster relief (Townsend, 2006). More than 1,300 citizens lost their lives and almost \$100 billion in property losses were assessed (Townsend, 2006).

The DoD, however, was cited specifically as a positive contributor due to its operational readiness and communication practices to field the challenges of such a dynamic humanitarian assistance/disaster relief situation (Townsend, 2006, p. 54). Still, the results were not optimal. Different chains of command between active duty (federal) and National Guard (state) forces and lengthy approval processes to solicit support confounded initial immediate response and collective command and control across all military-related entities (Townsend, 2006).

In another example, Boston's Central Artery/Tunnel Project, also known as the *Big Dig* (Dettman, Harty, & Lewin, 2010), saw inordinate cost overruns and questionable accountability. The Massachusetts Highway Department awarded the project, but the Federal Highway Administration delivered federal funding and led overall project oversight (Dettman, Harty, & Lewin, 2010). Although the complexity of the project affecting Boston's major highway thoroughfares was a key contributor to delays and cost increases, the use of several hundred contractors also contributed to oversight challenges (Dettman, Harty, & Lewin, 2010).

Management of private companies working on the project was cited as a principal reason the project did not go as well as originally conceived (Fryer, 2012). The project ultimately cost nearly \$15 billion, more than five times its original \$2.6 billion estimate, and a principal reason Congress capped the original plans to cover only 90% of the project's costs; excess costs fell to the Massachusetts state taxpayer (Fryer, 2012). Falling ceiling tiles inside the tunnel led to one death and calls for more public sector transparency throughout the project are contributing to ongoing dialog about how to plan for costs and potential challenges associated with other public sector highway projects of similar scope (Fryer, 2012).

In a third example, a country's security may be informed partially by its ability to warn of potential existential or political threats to a nation's well-being. The September 11, 2001, attacks on the United States revealed public sector challenges with information sharing and effective cross-organization collaboration (National Commission, 2004). The 9/11 Commission's findings were an admonishment against perceived redundant efforts and an encouragement to public sector entities to improve their teaming approaches through the establishment of the National Counterterrorism Center charged with ensuring collaboration between personnel from several federal agencies unified in their efforts to deter potential additional attacks against the U.S. Homeland (National Commission, 2004).

Successful synergy: public sector HPTs. The military raid of Osama bin Laden's compound in Pakistan is an oft-cited example of a successful military operation (Monroe, Hornick, McFadden, Roegiers, & Anderson, 2011). The detailed planning,

intelligence gathering, and secrecy enabled Navy SEALs to capture the mastermind behind the 9/11 attacks (Monroe, Hornick, McFadden, Roegiers, & Anderson, 2011); the attacks originally exposed critical public sector collaboration and teaming shortfalls (National Commission, 2004). Elite Special Forces teams often are admired for their ability to operate cohesively and can serve as examples of DoD HPTs even when the overall mission fails (Monroe, Hornick, McFadden, Roegiers, & Anderson, 2011). Such rapid response teams vested with extraordinary accountability for results are unique, even among public sector teams, due to the time pressures and high-risk tasks they undertake, requiring flexible and adaptable approaches to problem solving (Aubé & Rousseau, 2011; Hagemann, Kluge, & Ritzmann, 2012; Veestraeten, Kyndt, & Dochy, 2014).

In a second example, many watched and waited anxiously in 2010 to learn whether 33 miners trapped approximately 2,050 feet below the earth in Chile would be rescued after 69 days underground (Iliano & Wade, 2010). Chile recently had suffered other disasters that had created pressure on the Chilean Government to respond successfully to the accident (Macqueen, 2011). The Chilean mining industry similarly found itself innovating crisis response innovations, including the capsule that would carry each miner, one-by-one, to the safety of the earth's surface (Iliano & Wade, 2010). Eyewitness accounts asserted a lack of safety oversight by the mine's owners; the regional police chief credited the miners' families with exerting the pressure that would lead to a successful rescue effort despite initial government concerns about permitting additional access to the collapsed areas (Macqueen, 2011).

The Chilean Government ultimately fulfilled its promise to rescue the miners regardless of how long the effort took (Macqueen, 2011). This example of effective teaming highlights the Chilean government's recognition of a need for collaboration with and its employment of the operational proficiency resident at the state-owned National Copper Corporation of Chile (Edmondson, 2012; Rashid, Edmondson, & Leonard, 2013). Denholm and Kangas (2010) characterized this type of collaboration as almost public sector in nature because it supported government objectives and not private sector output traditionally focused on non-life-threatening functions that could be performed by a contractor. The authors also noted some times of public sector work preclude public-private sector collaboration; other governmental core missions can be achieved only by the governmental agency itself as part of its core mission (Denholm & Kangas, 2010).

The Chilean government-led team worked across multiple lines: initial confirmation the miners were alive, sustainment efforts to ensure the miners received requisite physical and emotional sustenance, development of new tools to reach and extract the miners, public relations interactions with the press, and care for the family members (Rashid, Edmondson, & Leonard, 2013). The rescue effort led to collaboration with Australian, American, and Canadian firms, the Chilean Navy, and the National Aeronautics and Space Administration (NASA) (Rashid, Edmondson, & Leonard, 2013). The approach highlighted openness to ensuring access to resources and expertise to affect high-performance and effectiveness (Edmondson, 2012). Aspects of the Chilean team's efforts can be identified in Wheelan's (as cited in Albert & Fetzer, 2005) team effectiveness instrument, an adaptation of which is reflected in Table 1.

Table 1

Aspects of Team Effectiveness

Problem-solving and relationships	Roles and goals	Feedback and structure
Time to define problems Planning how to solve problems Effective decision making strategies Implementing solutions Methods for evaluating solutions Accepting member behavior Group norms to encourage performance Time for accomplishing goals Cohesiveness and cooperation Effective conflict management	Clear about group goals Agree on group goals Task requirement to work together Clear about roles Accept their roles Assignment match abilities Open communication	Members receive regular feedback Members give each other feedback Members use feedback to make improvements Members set norms to encourage innovation Subgroups are integrated to team Teams are small in size

Note. The categories identified in this team effectiveness survey also broadly align with other findings on effective teaming, such as those by Edmondson (2012) and Katzenbach and Smith (2006). Adapted from "Smart Community Networks: Self-Directed Team Effectiveness in Action" by S. Albert and R. Fetzer, 2005, *Team Performance Management*, 11, pp. 144-156. Copyright 2005 by the Emerald Group Publishing Limited. Adapted with permission.

Albert and Fetzer's (2005) characteristics of effective team performance, depicted in Table 1, are structured upon three interdependent pillars: problem-solving and relationships; roles and goals; and feedback and structure. In reviewing the Government of Chile's approach to rescuing the trapped miners, clear examples of the employment of Albert and Fetzer's (2005) characteristics can be identified across all three pillars. For example, public and private sector personnel involved in the rescue had a clear understanding of the goal, the time constraints driving the multi-sector teams toward

successful resolution, the need for cohesion and cooperation, the unique functional contributions each team member made, and a constant feedback cycle that included the miners' families. Teams may look to Albert and Fetzer's (2005) organized list as a means by which to measure performance based upon the three broad pillars and associated sub-characteristics.

Sharing Effective High-Performance Team Practices

It may seem that once an effective HPT is established, its practices and lessons learned could be shared quickly among other teams within the organization. Transferring one group's experience to another, however, frequently is difficult (Yin, 2014). Ansari, Fiss, and Zajac (2010) noted that such pre-packaged solutions to organizational process challenges are difficult to align. A tailored solution incorporating cultural, political, technical, or other organizationally specific dynamics, may be necessary (Ansari, Fiss, & Zajac, 2010). Tailoring approaches to a team's context and broader organizational structure, strategy, and leadership also can improve team effectiveness and job satisfaction among teams (Körner, Wirtz, & Göritz, 2015).

Differences in adaptation among teams may be explained by a lack of perfect alignment (Ansari, Fiss, & Zajac, 2010). The propensity of adaptation will depend upon how broadly the practice can be interpreted for local conditions, a different scope of size or scale, and the degree of complexity—the latter of which increases the likelihood the practice will be adopted without tailoring (Ansari, Fiss, & Zajac, 2010). The authors' findings suggest organizations seeking to transfer high-performing techniques must consider whether they wish the specifics or the spirit of the practice are to be transferred.

Managers must also anticipate the need for tailoring to enable comparative organizational teams.

Compartmentalized examples of effective public sector performance exist. The components of these best practices, however, have not led to broad transference to other public sector entities, even within their own organization (Fryer, Antony, & Ogden, 2009). The Army and other DoD teams frequently encourage taking the time to craft *after action reviews* (AARs) (Edmondson, 2012) as do SWAT teams (Bechky & Okhuysen (2011). These reports are intended to capture the best and worst of the experiences and distill important lessons learned from which others are encouraged to draw. The reports also serve as an example of reflective team learning, which has been found to improve team adaptation to interfering events (Oertel & Antoni, 2014).

As noted earlier, every team's composition is different, suggesting the team's approach to know transfer with new members will be difficult among each team based on the team's context, culture, and desired output. The added pressure of a transient and constantly shifting team structure further challenges the team member and associated cognitive and cohesive stability frequently lauded as a critical function of effective teaming (Abbott & Bush, 2013; Arnulf, 2012; Katzenbach & Smith, 2006). New team members can speed their integration into the group by foregoing individual references (e.g. I, me) in favor of plural pronouns (e.g. we, us), which has been shown to hasten a sense of shared identity and perceived assimilation (Kane & Rink, 2015).

Public sector teams face many challenges (Berlin, 2014), among them team composition and effective knowledge transference among transient members. They may

be unable to use team member personality as a means by which to gauge the team's overall composition or impact of converging personalities; public sector organizations often rely upon knowledge, skills, and abilities, not personality tests, to determine organizational fit. The result may be divergence along the consciousness and agreeableness personality traits, ultimately lessening the team's performance (Halfhill, Nielsen, Sundstrom, & Weilbaecher, 2005).

Personality-based characteristics also may contribute to a team's predisposition to effective team knowledge transference. For example, military teams were found to achieve significant levels of accomplishment, high conscientiousness, and agreeableness (Halfhill, Nielsen, Sundstrom, & Weilbaecher, 2005), which may have supported their ability to satisfy goals. These characteristics, particularly conscientiousness and agreeableness, can also contribute to team effectiveness (Halfhill, Nielsen, Sundstrom, & Weilbaecher, 2005), including sharing knowledge about effective team practices with others.

Organizations may benefit from determining which of the four levels of institutional drivers—the individual employee, the organization itself, the field in which the organization resides, or national business systems (Angus-Leppan, Metcalf, & Benn, 2010)—are contributing to the need for transference of HPT practices. Upon examining public sector organizations experiencing change, Andrews, Cameron, and Harris (2008) found the actual implementation of change management practices is challenged by a number of factors, including change agents, the nature and speed of the change, education about the need for and specific outcome expectations of the change, the frequency with

which change initiatives are encouraged, and the organizational construct itself. Many participants in the authors' qualitative study, including public sector employee participants, identified resistance to change as another factor that may affect positive outcomes (Andrews, Cameron, & Harris, 2008).

Planning early for potential resistance and facilitating understanding of the importance of the effort may mediate aspects of resistance to organizational change (Erwin & Garman, 2009). Separately, incorporating a mentoring approach that included consideration of internal and external stakeholders' support for the change as well as the promotion of inculcating the change itself improved the likelihood the desired change would be adopted (Andrews, Cameron, & Harris; 2008). Similarly, participants noted their confidence in executing the desired change(s) improved when they understood the reasons and context for the required changes (Andrews, Cameron, & Harris; 2008). All of these practices may contribute to an environment that celebrates HPTs and encourages shared knowledge of best practices among teams (de Waal, 2011).

Summary

During this literature review, effective high-performance teaming was discerned to distill to a few characteristics: the rare amalgamation of a small group, shared sense of focus or purpose, interdependence, commitment, and mutual accountability, the congress of which achieves unusual effect and output (Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 2006). The early writings of Lewin (1943), Newcomb (1950), and Sherif (1958) greatly informed the theoretical foundation upon which this study's literature review was organized. Specifically, Lewin's (1944b) findings that

studying groups in their natural contexts can lead to explanations about how groups interact and that the role of group composition predicts group effectiveness aligned with Edmondson's (2012) later identification of effective teaming practices. Newcomb (1950) added to the literature through his descriptions of the group member's behavior as a function of his or her role in the group. The behaviors serve as dependable antecedents upon which other group members can predict outcomes and adjust their behavior accordingly to achieve collective successful completion of shared goals. Sherif (1958) found that disparate groups were postured best for success when these groups shared compelling goals and understood these goals could only be met through intergroup collaboration, an important contributor to the reduction of intergroup conflict and a significant component of later writings describing effective high-performance teaming (Katzenbach & Smith, 1993, 2006).

Johnson and Johnson's (2013) findings on group theory and Edmondson's (2012) contributions to teaming theory informed this chapter's discussion on the specific components of teaming, such as team composition and diversity, group cohesion, and team effectiveness. The review also included examination of Katzenbach and Smith's (1993, 2006) findings on the characteristics of HPTs before identifying basic challenges to effective teaming, such as conflict, level of virtualization, and competition between team members. A number of public sector team failures and successes were described before findings on the difficulty of transferring characteristics of successful high-performance between teams and organizations were examined.

Although broad perception of sluggish public sector response to citizen need negatively affects public confidence in government (Steinhauser, 2014), it is possible public sector teams achieve high-performance more than is actually documented due to access challenges thwarting the documentation of these teams' experiences. A recent meta-analysis conducted to examine the relationship between cohesion and performance underscored the relative lack of studies focused on military member experiences (Castaño, Watts, & Tekleab, 2013). Kirke (2010) noted that researcher access to military members' experiences particularly is challenging and highlighted the rarity of in-depth studies of military groups. This suggested that conducting a related case study might afford a contribution to the literature.

In the next chapter, an explanation is offered for why a qualitative, descriptive case study was appropriate for this study. Data collection methods employed, including the use of semistructured questions and interviews to address this study's RQs, described. Procedures followed to document a participant's consent to participate in the study are also described, as are efforts made to limit biases. The efforts taken to conduct a study of exemplary, high standards are also offered as evidence to assure confidentiality, validity, and sound construct while maintaining the highest ethical standards possible given the sensitivities surrounding the unique participant sample of this study.

Chapter 3: Research Method

Introduction

HPTs yield improved operational and financial efficiencies (Katzenbach & Smith, 2006), which are particularly desired during periods of financial austerity. The Obama Administration, like others before him, encouraged federal agencies to aspire to qualities associated with high-performance organizations (OMB, 2013). Such organizations employ teams that focus on outcomes, consider the nature of team composition, hold members mutually and personally accountable for output, and possess overlapping skill sets to allow interdependent role satiation as tasks and team member absence require (de Waal, 2010; Katzenbach & Smith, 2006).

Budget cuts, questions about public sector accountability, and demands for improved efficiencies (Carter, 2013; Hagel, 2013; Pellerin, 2015; Sisk, 2015) underscore the need to examine the nature of public sector high-performance teaming. Katzenbach and Smith's (2006) analysis of HPTs identified several traits fundamental to HPTs, including small size; agreement on approach, purpose, and objectives; accountability for results; and a sense of commitment to one another. Yammarino, Mumford, Connelly, and Dionne (2010) encouraged the use of semistructured interviews to gain insights into military teaming dynamics and the effects of their surroundings on performance. In this study, I sought to examine whether DoD members identify with and cultivate characteristics of HPTs and how these experiences may affect team outcomes.

Chapter 3 contains descriptions of the research design and rationale and the role of the researcher, an explanation of the research design selected, and identification of the

data analysis approach. Issues of trustworthiness, including transferability, credibility and validity issues are also discussed. Lastly, the chapter contains information on the treatment of ethical issues, including the researcher's responsibilities to participants.

Research Design and Rationale

Yin (2014) stated that the specific case itself was the most important aspect of the case study. The nature of the researcher's questions contributes to the confirmation that a case study is the correct research approach (Yin, 2014, p. 4). Case studies also enable examination of long-term, associated events instead of irregular occurrences (Yin, 2014). Researchers derive concepts and hypotheses from the study. A researcher may also decide to employ a case study based on the researcher's desire to examine how or why a current experience, issue, or phenomenon upon which a researcher has minimal impact came to be (Yin, 2014).

Through collaboration with my committee methodologist, I determined that the descriptive case study was more relevant to this study than the explanatory or exploratory methods. Specifically, the descriptive case study encouraged deep analysis (Yin, 2014) and allowed examination of how public sector DoD employees experienced working in office-based teams. Another desired study outcome was the identification of what may be learned from public sector DoD team members, particularly when the teams on which they participated achieved characteristics and practices observed among HPTs (Katzenbach & Smith, 2006).

In this study, I sought to address the following RQs:

- 1. To what extent do public sector DoD members experience high-performing teams in their organization(s)?
- 2. How do public sector DoD team members experience characteristics of highperforming teams in their organization(s)?
- 3. To what degree do public sector DoD team members believe high-performing team characteristics contribute to their organization's performance?
- 4. To what degree do high-performing public sector DoD team members perceive they influence others within their organization to adopt high-performing teaming characteristics?

I also sought insights into why some public sector DoD teams succeed and exhibit characteristics of HPTs while others fail. The study of these effects offered a potential a positive social contribution by adding to the literature examining DoD team member experiences (Yammarino, Mumford, Connelly, & Dionne, 2010) and by attempting to identify best practices which may aid practitioners to address team construct, effectiveness, and performance issues. This may be particularly useful at a time when DoD teams increasingly experience austerity measures and other external constraints (Carter, 2013; Hagel, 2013; Sisk, 2015).

Yin (2014) encouraged the use of interviews as a primary collection method. I relied upon responses to semistructured IQs by public sector DoD employees with experience working on teams in an office environment. Yin (2014) also encouraged the use of documentation, records, and direct observations to further inform case studies.

These materials were not sought for inclusion in this study, however, because such DoD

materials, as they pertained to the participants' experiences, were inaccessible during the time of data collection.

The Walden University Institutional Review Board (IRB) approved the conduct of this study. A separate DoD IRB reviewed and approved the study for procedural and human subject research compliance. The DoD IRB's review did not constitute DoD sponsorship of this study. Based on the DoD IRB review recommendations, participants were advised and confirmed that they clearly understood they must complete all study-related activity during off-duty hours; this was ensured by adding related language to the solicitation email (Appendix A), informed consent form, and IQs (Appendix C). Semistructured IQs (Appendix C) were sent to participants via email due to the geographic locations of many participants (solicitations covered 17 time zones; responses covered 12 time zones) and the DoD IRB's requirement for participants to only provide responses during off-duty, after-work hours. Follow-up, face-to-face and telephone interviews were held to clarify and expound upon responses as required. These interviews were based, in part, on respondent availability and amenability to follow-up discussions.

Semistructured interview questions were employed to achieve a balance between questions informed by the literature and allowance for participants to expound upon related materials in a deep and descriptive manner. As will be expounded upon in the sections below, data were first manually coded then coded again using software specifically developed for coding qualitative materials, NVivo 11. Employing codes derived from the literature and informed by themes emergent from the data (Appendix F),

I sought to correctly capture and exhaustively analyze participant responses to the semistructured IQs and transcripts of participant interviews.

Research Tradition

A qualitative case study affords the researcher the opportunity to expound, educate, or inform others about a phenomenon or condition (Yin, 2014). The researcher determines whether the case study is appropriate when determining the RQs (Yin, 2014). Researchers employ case studies when they seek to examine a current event or experience over which a researcher has minimal impact (Yin, 2014).

Lewin (1946) wrote that interviews were preferred over surveys when deeply examining group dynamics and relationships (p. 37). More recently, Tannenbaum, Mathieu, Salas, and Cohen (2012) encouraged the use of interviews, associated documentation, observation, and case studies to improve understanding of teams facing dynamic situations. Yin (2014) also noted a preference for case studies when a researcher desired to investigate a current event without researcher intervention in the event or those experiencing it.

The goal of this study was to examine how public sector DoD employees experience and perceive high-performance teaming in office-based environments. This goal led to the identification of interviews as the most appropriate source of evidence. Several authors recently encouraged the use of qualitative case studies to further examine team dynamics (Aime, Humphrey, Derue, & Paul, 2014; Cronin, Weingart, & Todorova, 2011) and to discern how leaders behave and think in complex environments (Morris & Williams, 2012). Other authors stressed the importance of understanding team member

characteristics, team processes, and their interplay among HPT members to comprehend more fully what enables high-performance and effectiveness (Bonebright, 2012; Humphrey & Aime, 2014).

Quantitative methodology considerations

I determined a quantitative methodology was inappropriate because I desired to deeply examine a contemporary phenomenon that sought insights beyond those captured via traditional quantitative instruments. Huberman and Miles (2002) wrote that case studies concentrate on the interplay of events and persons in the same environment. The authors encouraged defining both the case and the context within which the case(s) occurred. Although quantitative instruments may have supported measuring specific aspects of an HPT member's experience, Merriam (2009) described the completed case study as deeply descriptive of the experience being examined and further encouraged researchers to consider all potential events and interactions. Such considerations contribute to the deep examination sought in a case study and reinforced by a participant's input in his or her own words, a dynamic usually not enjoyed through the use of quantitative instruments.

Qualitative methodology considerations

Other forms of qualitative research methods—narrative, phenomenology, grounded theory, and ethnography (Creswell, 2012)—were rejected as unsuitable for this study, which is centered on understanding how particular public sector DoD team members experience characteristics associated with high-performance teaming (Katzenbach & Smith, 2006). A narrative approach was unfitting for this research

endeavor because I sought to understand the collective experiences of multiple team members vice an individual's singular recollections (Creswell, 2012). Similarly, a phenomenological approach was assessed as unsuitable because of its focus on individuals who shared the same experience (Creswell, 2012); no fully intact, long-term, high-performing DoD teams were included in this study, largely due to the highly transient nature of the DoD workforce.

I did not seek to develop a grounded theory describing how to encourage public sector HPTs, but the findings derived from this study may offer contribution towards the future development of a grounded theory (Creswell, 2012). The purpose of this study was not an ethnological focus on shared culture, centered on individual experiences and perceptions (Creswell, 2012). Through this study, I sought to examine how individual public sector DoD members experience characteristics of high-performance teaming in multiple office-based environments.

Role of the Researcher

I did not seek a role as observer or participant, but rather as an examiner of experiences through carefully crafted semistructured IQs (Yin, 2014) posed to DoD members to better understand their DoD office-based team experiences. Purposive sampling was employed, soliciting from among DoD associates who met the minimum criteria. Snowballing was subsequently employed based upon recommendations by participants who provided contact information for additional study candidates.

As described in Chapter 1, 54 candidates were originally identified and collectively offered an additional 14 candidates from among their associates who met the

minimum qualifications (DoD members with experiences working on office-based teams). Of the 68 candidates contacted, 45 returned informed consent forms; and 39 ultimately provided completed responses to the questions in Appendix C. None of the final 39 participants were excluded because all met the minimum study participation standards and provided complete responses. The size of the sample contributed to efforts to triangulate inputs, support the reliability of this study's findings, and potentially identify practices or approaches for consideration by practitioners. The goal of this study, however, was not to encourage transferability (Yin, 2014) among cases.

I knew some of the proposed participants through shared or historical organizational experiences, but ensured power issues did not emerge by confirming that no formal supervisory or rating relationship(s) existed with any participant at the time of data collection. Such interpersonal associations can yield significant concerns about how the relationship will affect the outcome of the study (Yin, 2014). A counter-argument can be made, however, that network-based access affords important opportunities for examination otherwise unobtainable where unique access is not present (Creswell, 2012; Merriam, 2009; Yin, 2014). Each participant and his or her inputs were treated with the utmost of confidentiality, such as meeting participants at off-site locations for interviews after work hours. Participants were not advised who ultimately provided inputs, even if the participant provided contact details (snowball) for an additional participant candidate.

Safeguards against bias included employing semistructured interview questions (Appendix C) sent via email to participants who returned responses in writing, employing their own voice. For participants who consented to an interview, member checking

(Creswell, 2012) was used to confirm interview transcriptions accurately reflected their responses. No incentives were offered for participation in this study.

Methodology: Participant Selection Logic

Public sector DoD employees who self-identified as having participated in a public sector DoD office-based team were included as candidates for this study.

Candidates were solicited based on their current or historic experience as a DoD member working in an office-based environment. DoD contractor personnel were not purposefully recruited for participation in this study because the DoD IRB approval only applied to DoD members, the focus of this study.

The sampling strategy was based upon the premise that public sector DoD employees experienced working in office-based teams, some of which may have exhibited characteristics of high-performance teaming or were recognized by others as contributing positively to the overall effectiveness of the organization. These members were also assumed to experience membership in cross-functional teams, which frequently are associated with knowledge-based work (Aime, Humphrey, Derue, & Paul, 2014), often conducted in office-based environments.

Participation in this study was voluntary; neither monetary incentive nor token of appreciation were offered for participation. Katzenbach and Smith (2006) noted that most HPTs are small in size. I anticipated examining the experiences of multiple public sector DoD team members with unique experiences. My original goal was to collect responses from or conduct interviews with an intact team, a minimum of 20 participants, or until saturation was reached as defined by the noticeable repetition of themes (Yin,

2014). Ultimately, 39 participants provided responses; all self-identified as possessing work experience on DoD office-based teams. Based on the analysis of the responses, no evidence emerged that the general uniqueness of participants who did not share the same, specific team experiences affected the study's findings or outcomes. The population from which the sample was drawn was comprised of DoD members from the United States Army, Marine Corps, Navy, and Air Force as well as DoD civilians. To ensure saturation, snowballing (Patton, 2015) was employed to further identify participants who could expound upon experiences working on teams that exhibited high-performing characteristics. I suspended candidate solicitations when I was unable to identify any additional knowledge or unique insights to aid in comprehending the phenomenon under study (Creswell, 2012; Yin, 2014).

Formal DoD organization support was neither sought nor provided for the study. Study participants represented multiple DoD organizations, which I am unable to identify by name due to confidentiality concerns and the potential for participants to be identified given the small size(s) of some of the participants' offices. I ensured participants understood all study-related input must be provided during off-duty hours (as noted in the email solicitation, Appendix A; informed consent form; and the IQs, Appendix C) to ensure no emergence of unintended false impression of organizational support or undue influence over the participant's decision to respond. After a candidate expressed interest and provided a personal email address, participants received an email (Appendix A) explaining the purpose of the study, desired sample participant qualities, and anticipated participant contribution requirements (e.g. returning a signed informed consent form and

responding to semistructured IQs (Appendix C)). The informed consent form also contained information advising the participant of his or her right to remain anonymous and of the participant's right to terminate his or her participation in the study at any time.

Methodology: Instrumentation

Yin (2014) identified six potential sources of evidence—documentation, archival records, interviews, direct observations, participant-observation, and physical artifacts. Although such materials can contribute to corroborating the findings yielded in interviews (Yin, 2014), this study did not employ such sources in part due to the requirement to focus participation to after-hours, off-duty settings. Semistructured interviews thus served as this study's foundational source of evidence.

Yin (2014) encouraged the use of interviews because of the insights into the human dynamic interviews can provide. Similarly, semistructured questions based on the RQs and tied to themes derived from the literature review (Appendix C) informed this examination of DoD team member experiences and whether they reflected characteristics of HPTs (Katzenbach & Smith, 2006). This approach also aligned with Yin's (2014) assertions that interviews can yield critical understanding of a phenomenon.

A standardized, open-ended interview may increase data collection and response comparability across participants, but may restrict exploration of experiences or observations intrinsic to the participant (Patton, 2015). To remedy this, a semistructured interview approach allowed for identification of shared experiences across participant interviewees while encouraging opportunities to explore new avenues previously not considered or identified as emergent from the literature review (Appendix C, question 8).

A researcher and participants can weaken interviews, however, if bias, poor recollection, or reflexivity emerge (Yin, 2014). Despite the potential limitations, the collected responses to the IQs were critical to my examination of study participant experiences and perceptions of how public sector DoD employees experienced teaming.

Content validity for this study was established by ensuring a clear chain of evidence between the question and the RQ (Appendix B) or significant findings in the literature review (Yin, 2014), which were also reflected in the codes. As described in the next section, the IQs were reviewed through a pilot study prior to use in the field study. This contributed to researcher confidence participants could understand IQs and, through the coding of pilot study responses, to ensure the IQs contributed to answering the study's RQs.

Methodology: Pilot Study

A pilot study supported refinement of the content and procedures of my data collection endeavors (Yin, 2014). Identical processes were followed during the pilot study and the final study to enable testing of the interview instrument; identification of any issues related to the process, wording, and interpretation of the questions; and honing of the subsequent coding and interpretation practices. Refinement of IQs was based on the informed insights of a pilot study sample of two participants and with the approval of my committee chair. Pilot study participants received an email (Appendix A) describing the study and an informed consent form offering further details about the background of the study, procedures, the voluntary nature of the study, and the participant's right to confidentiality. Pilot study participants signed and returned the informed consent form

prior to receiving the IQs (Appendix C), the same practice employed during the final study. Semistructured IQs (Appendix C) were derived from the literature (Yin, 2014) and informed by this study's research questions.

The pilot study also served as an opportunity to address software issues (Yin, 2014), such as returning informed consent forms. No construct validity or reliability issues necessitating remedy (Yin, 2014), such as whether the IQs were clear to the participants, were identified based on the practices and processes employed during the pilot study. Chapter 4 contains additional details about the pilot study.

Methodology: Recruitment, Participation, and Data Collection

Self-identified DoD team members were recruited by being asked if they were interested in participating in a study on DoD teams. Interested parties provided a personal email address to which an email (Appendix A) was sent containing a blank copy of an informed consent form that advised participants of the study requirement to provide answers to IQs (Appendix C). These exchanges were undertaken after work hours to ensure compliance with DoD IRB requirements.

Upon receipt of an informed consent form signed by a candidate, I signed and returned the informed consent form and attached a Word document containing the semistructured virtual questions (Appendix C). Thirty-nine participants returned completed responses. Data were collected from mid-September to mid-November, 2015 personally by the researcher to ensure confidentiality, particularly because participants confirmed a desire for strict anonymity for participation in this study.

Follow-up interviews depended, in part, upon the participant's response to the semistructured IQs or the participant's availability for follow-on discussions. The typical follow-up interview was approximately half an hour. With the consent of the participant, follow-up interviews were recorded with a voice recorder to ensure accurate transcription of the interviews. Quotations from recorded interviews were confirmed directly with the participant to ensure accurate representation. Participants exited the study following confirmation of responses; some requested and will be provided a published copy of this study.

Methodology: Data Analysis Plan

Analysis of responses to the IQs and interview transcriptions was completed using codes and themes the researcher identified in the RQs and literature review (Appendix E). The derivation of these codes is further described in Chapter 4; no other researcher reviewed or coded the data to ensure confidentiality remains preserved. Data first were manually coded, and then coded again using the qualitative data exploitation software NVivo 11 to facilitate examination and additional coding of emergent cross-participant themes. Each participant's responses were examined first by individual participant, then by IQ to ensure holistic consideration of all themes. Discrepant cases were welcomed to allow for consideration of alternate theories of explanations or for development of potential future study RQs (Yin, 2014); discrepant cases are further addressed in Chapter 5 of this study.

Issues of Trustworthiness

Yin (2014) described four types of criteria for judging a study's quality: construct validity, internal validity (credibility), external validity (transferability), and dependability. To ensure this study's construct validity was sound, a clear chain of evidence among the literature review findings, the interviews, and the final, synthesized findings was employed. Field notes were taken to document references; capture impressions aiding transcriptions of interviews; and identify clear ties among the RQs, literature, data collected, and synthesized findings. Participants were able to review their inputs before returning inputs via email. Based on the frankness of the responses, as presented in Chapter 4, no attempts by the participants to self-censor inputs or avoid providing fully honest responses were discerned.

Rival and alternate explanations were sought to further bolster the study's internal validity (Yin, 2014). Pattern matching was also sought via the coding of shared themes across the literature review and participant responses to strengthen the study's internal validity (Yin, 2014). Triangulating findings among multiple public sector team members further strengthened the study's internal validity, as did participant reviews of the responses captured in the study.

External validity was established by using the components of the theoretical framework identified in this study's literature review to thoroughly compare shared outcomes (Yin, 2014) across public sector DoD HPT members' experiences (Yin, 2014). The deep and thorough examination of the phenomenon under study (Merriam, 2009) was also sought by encouraging participant reflection on topics not identified in earlier

IQs (Appendix C, question 8). Variance among participants and their experiences limited pure transferability of findings (Yin, 2014) to other public sector teams. The emergence of broad themes and insights identified in this study, however, still may afford practitioners an opportunity to employ best practices as appropriate.

Reliability, or dependability in a case study, can be challenging to achieve; each case study is unique, bounded by context (Huberman & Miles, 2002). In this study, dependability was sought by ensuring the data collection procedures and other operations were documented clearly so that the process itself could be repeated, even if the outcome is unlikely to yield the same results based on participant variance (Yin, 2014). Such process clarification also contributed, in part, to the use of audit trails to ensure biases and oversight have been limited or removed.

Confirmability, or objectivity, was sought by acknowledging my experience as a public sector employee and other experiences or biases that may have affected the study. Creswell (2012) encouraged bracketing of experiences whereby a researcher records and sets aside biases. I bracketed my public sector experiences in a journal prior to the pilot study to ensure I was aware of them throughout the conduct of this study, including during the interviews, when taking field notes, and while analyzing and presenting collected data. This practice contributed to conscious objectivity in the conduct of this study and representation of its findings.

Ethical Procedures

The qualitative methodology's primary data collection input is that of the human experience. Ethical treatment of participants was paramount to the success of this study.

I strongly prioritized ensuring that all possible protections and ethical practices were the highest, most respectful I could employ, particularly considering the participant sample comprised of DoD personnel. I completed two separate training courses addressing ethical issues and the respectful treatment of human subjects in a research environment, as required for final approval by both the Walden University IRB (IRB number 07-13-15-0087861) and the DoD IRB (approval letter retained by the Walden University IRB). No participant over which supervisory/rating or power issues could be perceived was included in this study. Preservation of participant anonymity was achieved by contacting the participant directly via a personal email address provided by the participant.

Participant recommendations for additional participants through snowballing (Yin, 2014) were accepted, but the snowball participant's ultimate decision to participate in the study was not revealed to anyone. I sought to uphold my role as an objective researcher and to confirm commitment to academic integrity through the faithful reporting of observed data, as presented in Chapter 4. Participants were repeatedly advised of the guarantee of their right to anonymity and that they could exit the study at any time prior to final dissertation publication. Negative consequences were neither suffered by nor await the 29 DoD team members who elected not to provide responses to study participation solicitations or questions.

I retained the sole copies of the original data collected and associated materials in a password-protected laptop computer. Physical materials, such as interview tapes, were similarly kept in a locked space. Study-related documentation will be destroyed five years after the approval of the dissertation. The use of participant numbers (for example,

P1) rather than names or other clearly identifying information when referring to specific participants' responses, contributed to ensuring that identifying information remained in the strictest confidence.

Summary

In this chapter, the rationale for choosing the qualitative, descriptive case study and the role of the researcher was described. After considering available methodologies, a qualitative methodology was identified as the most suitable to examine the experiences of public sector DoD team members due to the qualitative, descriptive case study construct enabling the deep exploration of participants' experiences. As noted, many potential sources of evidence were considered. This chapter also contained a description of data collection processes, which offered an opportunity to code shared themes across participants' responses. These shared themes may offer practitioners insights into effective practices, as presented in Chapters 4 and 5.

Efforts were described to inspire confidence in the approaches used to ensure external and internal validity, reliability/dependability, and objectivity. Potential reflexivity impacts and the researcher's unique access to DoD members required bracketing of researcher experiences to ensure the study was conducted objectively and its results and findings represented accurately. The importance of ethical treatment of participants was also underscored in this chapter, as was the researcher's responsibility to uphold the utmost ethical practices. Chapter 4 contains a description of the pilot study and presentation of the collected data in greater detail.

Chapter 4: Results

Introduction

In this study, I examined the experiences of DoD members who have worked in office-based teams to determine the nature and extent of HPTs, team performance, and the sharing of lessons learned among others who may be influenced to inculcate characteristics of HPTs into their ongoing team processes. I was guided by the following RQs:

- To what extent do public sector DoD members experience HPTs in their organization(s)?
- 2. How do public sector DoD team members experience characteristics of HPTs in their organization(s)?
- 3. To what degree do public sector DoD team members believe HPT characteristics contribute to their organization's performance?
- 4. To what degree do high-performing public sector DoD team members perceive they influence others within their organization to adopt high-performing teaming characteristics?

In Chapter 4, I describe the pilot study and how it improved the approach to the field study. Data collected during the field study in response to nine semistructured questions (Appendix C) are also presented in the order of the four research questions developed for this study. This presentation approach enabled purposeful examination of the degree to which participant responses addressed the RQs.

Pilot Study

Prior to commencing this study, I consulted the literature on qualitative methodologies (Corbin & Strauss, 2014; Creswell, 2012; Denzin & Lincoln, 2005; McNabb, 2008; Maxwell, 2012; Merriam, 2009; Miles, Huberman, & Saldaña, 2014; Patton, 2015; Rossi, Lipsey, & Freeman, 2004; Sayer, 2010; Trochim & Donnelly, 2008; Wolcott, 2009; Yin, 2014), sampling techniques (Patton, 2015; Schwandt, 2015; Yin, 2014), and qualitative (Rubin & Rubin, 2012; Weiss, 1994) and reflective (Roulston, 2010) interviewing practices. Upon approval from the Walden IRB, two individuals who possessed the same characteristics sought among participants in this study (i.e. DoD members who had worked in an office environment-based team) were solicited for the pilot study. The size of the pilot study sample was based on Walden IRB guidance.

The pilot study participants did not note any difficulties or issues with the content of the email (Appendix A) or the informed consent form. Signing the form (printing it out and scanning it for return), however, proved cumbersome. To remedy this in the actual study and based on a recommendation from the Walden IRB, field study participants were offered an option to simply reply, "I consent" to the email. I then filled out the informed consent form on behalf of the participant, signed only my name and returned it to the participant for his or her records. In both the pilot and field studies, I informed all participants of the right to withdraw from the study without consequence at any time prior to publication of the dissertation.

The semistructured questions (Appendix C) were comprehensible as originally written, according to the pilot study participants. Thus, the questions used during the

pilot study were employed verbatim during the field study. Prior to reviewing the field study participant responses, I reviewed the literature for guidance on how to approach coding qualitative responses (Miles, Huberman, & Saldaña, 2014; Saldaña, 2013). From this review, I generated a provisional code list based on the conceptual framework (Figure 1) and literature review (Chapter 2). For the pilot study, I generated 26 codes grouped into four categories: *Team Structure*, *Team Effectiveness*, *Team Awareness*, and *Team Training* (Appendix E). I later updated the original coding matrices following the pilot and field studies.

I coded pilot study participant responses in a side-by-side table for ease of comparison—the small sample size made it possible—and then assigned codes from among the 26 original codes. *In vivo* pilot study participant quotes, which identified issues or areas not reflected in the original provisional code, were also captured. After coding the pilot study participant responses, I aligned the codes with the RQs. This was not done prior to coding the results to reduce the introduction of any researcher bias by forcing the coding of a response to a semistructured question such that it would purposefully align with a RQ (Appendix B). This alignment was then cross-referenced with the actual IQs.

• IQs 1, 2, 3, and 3a aligned with RQs 1 and 2. Based on the coding of pilot study responses, I anticipated that Team Structure (TS-XXXX) and Team Effectiveness (TE-XXXX) codes would predominate among pilot study responses. This expectation was confirmed following analysis of the coded responses.

- IQ4 aligned with RQ3. Based on the coding of pilot study responses, I
 anticipated that Team Effectiveness (TE-XXXX) and Team Awareness (TAXXXX) codes would predominate among pilot study responses. This
 expectation was confirmed following analysis of the coded responses.
- IQ5 aligned with RQs 1 and 2. Based on the coding of pilot responses, I
 anticipated that Team Structure (TS-XXXX) and Team Effectiveness (TEXXXX) codes would predominate among pilot study responses. This
 expectation was confirmed following analysis of the coded responses.
- IQ6 aligned with RQ4. Based on the coding of pilot responses, I anticipated that Team Transference Practices (TT-XXXX) codes would predominate among pilot study responses. This expectation was confirmed following analysis of the coded responses.
- IQ7 aligned with RQ2. Based on the coding of pilot responses, I anticipated that Team Structure (TS-XXXX), Team Effectiveness (TE-XXXX), and, importantly, Team Awareness (TA-XXXX) codes would predominate among pilot study responses. This expectation was confirmed following analysis of the coded responses.
- IQ8 was purposefully left open to allow participants to discuss any aspects of team experiences not addressed earlier. All codes were possible.

Following the results of the first- and second-cycles of coding, which included descriptive, values, and in vivo codes (Saldaña, 2013), six new codes were added to the original list for a total of 32 codes prior to commencing the final study.

I followed up with one pilot study participant face-to-face to clarify two question responses. We were able to meet easily. The participant did not wish to be recorded, so I simply captured the updated information and reflected it in my analyzed data. I confirmed with the pilot study participant that I correctly captured the input by showing the participant a copy of my written notes. Due to the small pilot study sample size, NVivo qualitative software was not used to analyze the data employed during the field study. The small pilot study sample size also made comparison and coding of themes emerging from participant responses easy; this was not the case for the field study due to the nearly 20-fold increase in responses.

Several important findings came from this pilot study. A small amount of participant demographic data (e.g. branch of service; whether the participant had military or experience (officer/enlisted/civilian); number of years of service in the DoD) was necessary to facilitate later broad description of participants and confirm participants were sampled from among all four branches of service and federal civilian experience. My committee chair approved pilot study observations, the additional solicitation of basic demographic information from field study participants, and onward progress toward the field study.

As a novice researcher, I welcomed the pilot study's results, which yielded an unplanned, unforced, and natural alignment between the responses and key themes in the literature. I viewed this serendipitous outcome as suggestive that efforts to develop synergy between RQs, IQs, and previous literature findings were at least partially successful. I entered the field study with a renewed sense of purpose and guarded

optimism that, with the support and guidance of my Committee, my approaches were sound and would contribute to confidence in this study's findings.

Setting

Volunteer participants with experience working on DoD office-based teams completed all aspects of this study's requirements after work, during off-duty hours at a location of their choosing. Sixty-eight candidates were invited to provide input, 39 participants completed informed consent forms and semistructured IQs (Appendix C), returned to me via email. Four participants consented to follow-up interviews that lasted approximately 30 minutes each; two were held in-person, at a location of the participant's choosing, while the other two were conducted via phone.

Demographics

As described in Chapters 1 and 3, study participants possessed experience as military professionals across the United States Army, Marine Corps, Navy, and Air Force, or as DoD civilians; some participants possessed both military and civilian experience. Criteria for study participation included experience as an officer, enlisted, or civilian DoD member who worked as members of DoD office-based teams. A list of candidates was crafted based on former and current DoD associates with whom no supervisory or rating chain relationships were present during the time of the study. Sixty-eight candidates were identified through purposive and snowballing sampling techniques; 39 provided informed consent forms and responses to questions depicted in Appendix B. As presented in Appendix D, of the 39 participants who provided input, 14 participants possessed military experience; 13 participants possessed both military and civilian

experience; and 12 participants possessed civilian experience. Length of experience, measured in years of service, varied among participants. To ensure confidentiality, participants in this study are described only as possessing military, civilian, or both military and civilian experience rather than by identifying the participant's service, grade (enlisted or officer), or specific length of service.

Data Collection

Participant data were collected between mid-September and mid-November, 2015. The 39 DoD participants were free to write and submit their responses after duty hours, at a location of their choosing; the length of time to complete the IQs varied among participants based on participant feedback. Four participants consented to follow-up interviews subsequently transcribed by the researcher. All interviews were recorded with an audiocassette recorder.

Fewer follow-up interviews were conducted than originally anticipated. This may be ascribed to the unanticipated depth and clarity provided by participants in their written responses and general participant availability across 12 time zones. Neither variation from anticipated data collection processes described in Chapter 3 nor any unusual circumstances were encountered in data collection. All responses were retained for inclusion in the study because all participants possessed past or current experience working as a DoD military or civilian member in an office environment, the minimum participant criteria.

Data Analysis

Following data collection and transcription of the four follow-up interviews, each participant was assigned a code (P1–P39, see Appendix D) to ensure confidentiality of the participant's identity. The same data coding approach described in the Pilot Study section of this chapter was used; codes were based on themes derived from the literature and pilot study inputs. Several additional themes emerged, necessitating an update to the code list (Appendix E) and the addition of a fifth major category, *Team Members*, to describe emergent themes about individual team members noted among the responses.

All collected data were first reviewed by hand and assigned codes manually. This allowed me to become more familiar with the inputs. I was also able to consider cross-references between the interviews given the length of time required to properly transcribe the interviews. No cases were deemed discrepant in their responses; all contained descriptions of experiences in a DoD office-based environment.

Following my initial manual review, all participant responses and transcribed interviews were uploaded into NVivo 11 qualitative software. Based on readings of how best to employ the software (Bazeley & Jackson, 2013), I coded each participant's inputs, being mindful of my original manual coding and looking for additional themes systematically derived from use of the software. I reviewed coded data in NVivo in two ways: first by reviewing holistic participant inputs (i.e. reviewing and coding the entire contents of a participant's responses to all questions and, as applicable, transcripts of follow-up interviews) and then by question (i.e. saving all participant responses to IQ1 in a single file and so on). These data analysis approaches—manually and electronically, by

participant, and by IQ—were employed to facilitate assurance that I coded and examined all related data as thoroughly as possible. In addition to expanding the code list to ensure new themes were captured, I also used memos to highlight unique insights not otherwise noted when comparing data across the same semistructured question.

Evidence of Trustworthiness

The strategies described in Chapter 3 were employed to support my commitment to meet confirmability, credibility, and dependability. These efforts included analyzing data employing codes derived from literature review themes; inclusion of participants across a range of organizations, U.S. Armed Forces branches of service, and length of military and civilian experiences; continuing to solicit candidates until saturation was reached; and the use of semistructured questions to elicit descriptive responses. I was concerned my original goal of 20 participants may be difficult to reach; the ultimate inclusion of 39 unique perspectives was a welcomed modification and further contributed to the trustworthiness of triangulated data given the shared themes across many of the analyzed responses, amplified further in the Results section of this chapter. As noted in Chapter 3, full transferability between cases is untenable given each case's unique parameters (Yin, 2014). As described in Chapter 5, however, some teaming best practices identified in this study may be of interest to practitioners for implementation.

Results

Collected data are presented in order of the RQs (rather than ordered by responses to the IQs). This approach enables examination of the degree to which the data collected answered each research question. In keeping with the qualitative nature of this study, the

section incorporates verbatim participant descriptions of teaming experiences. Additional information about each participant's DoD-related experience, such as the nature of the participant's DoD association and approximate length of service, may be found in Appendix D.

RQ1: Identifying Team Excellence

In RQ1, I sought to determine whether DoD team members who have worked in office-based environments experienced teams that shared characteristics of HPTs. To address this research question, participant responses were examined for alignment with Katzenbach and Smith's (1993; 2006) definition of an HPT:

- [A] small number of people
- with complementary skills...
- who are committed to a common purpose, set of performance goals, and approach
- for which they hold themselves mutually accountable (Katzenbach & Smith, 1993, p. 112). . .
- [and] who are deeply committed to one another's personal growth and success. (Katzenbach & Smith, 2006, p. 92)

HPTs are also exceptionally rare (Katzenbach & Smith, 2006), suggesting the true presence of such teams in a DoD environment may also be rare. When presented with elements of Katzenbach and Smith's (1993; 2006) definition of HPTs, as noted in IQ7 (Appendix C), 31 participants (P1, P3, P4; P5; P6, P7; P8; P9; P10, P11; P12; P13; P14; P16; P20; P21; P22; P23; P24; P25; P26; P27; P28; P29; P30, P31; P32; P33, P37, P38,

P39) of 39 total study participants identified experiences on at least one office-based team that aligned in whole or in part with traditional HPT characteristics. The frequency and consistency of these experiences varied.

In Figure 3, I present the frequency of participant responses that aligned with codes comprising the Team Structure coding category. I observed Team Structure category codes among participant responses to IQs 1, 2, 3, 3a, 5, 7, and 8, which were crafted to address RQs 1 and 2.

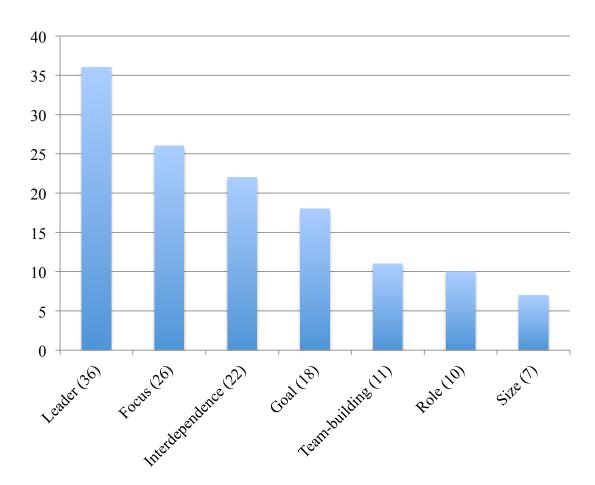


Figure 3. Observed Team Structure codes and frequency among participant responses (Appendix E, Table E1).

Identifying the extent of DoD HPT experiences. When identifying team experiences in a DoD office-based environment, one participant, P3, recalled the team was diverse, comprised of military, civilians, and contractors. Each team member had a unique role and experiences that benefitted the team, and the team had a "clear mission" (P3). Team members "contributed their expertise, learned from others and recognized their value, and excitedly worked through obstacles" (P3) while achieving organizational goals.

Another participant, P8, offered a second example of a successful team that experienced several HPT aspects, such as small size (six military and civilian members), shared focus, as well as the

integration of strengths of all team members allow[ing] all to learn from one another and improve the function of both military and civilian members; trust, clear direction; [and a] team effort with flexible, responsible leadership...[who] acted as a buffer between senior leadership and team members, enabling team members to focus on the job.

The team also exceeded expectations; their success led to new processes (P8).

A third participant, P10, described a small team with a shared focus and interdependence among skill sets due to the "hand-picked" (P10) nature of the team. The team also enjoyed "broad guidance" (P10) from its leadership to achieve performance goals. Mutual accountability was reinforced by the "high visibility" (P10) nature of the program that had DoD-wide impact. The "high quality" (P10) of the team and the team members' willingness to help one another with tasks and share knowledge underscored

the team members' collective commitment to the success of the team and to one another, according to the participant (P10).

Another participant attributed the success of "three highly effective teams" (P1) to a number of characteristics, including

- clear expectations for our work product (deliverables) [sic] and individual performance;
- good division of labor (individual strengths balanced against tasks) [sic];
- visible results;
- timely, useful feedback (both good and bad) [sic], allowing us to adjust our process;
- strong leadership (used tasks to educate us on effective techniques, allowed us to experience, recognized good effort and shared credit) [sic]; and
- members motivated by the mission, willing to make personal sacrifices to do the job.

As presented in later sections of this study, several of these characteristics align with characteristics of HPTs and are shared by other participants.

One participant, P17, perceived that the success of a HPT was closely aligned with individual team members and those who oversaw the team's purpose. Specifically, teams function "in a high-performing manner depend[ing] not only on the attributes and resolve of the team members, but also on the design, scope, and functioning of the team as envisioned by those who establish it" (P17). This assertion was shared by others among responses in which specific aspects of HPTs (Katzenbach & Smith, 1993; 2006)

were highlighted, including a team's people, purpose, accountability for results, commitment, and participants' perceptions of challenges that teams must overcome to be effective. Still another participant recalled a "most successful team [which] contributed to the organization's goal through the effective use of clear and concise communication which ensured all team members were on the same page, striving to achieve the desired mission effectiveness and goals" (P33). As further described below, participant responses to IQs 1, 2, 3, 3a, 5, and 7 yielded themes addressing several key aspects of HPTs: team size, complementary team member expertise; a shared sense of purpose; mutual accountability; and commitment to one another that collectively contributed to achieving organizational output goals.

The people. A team's members serve as the primary component of Katzenbach and Smith's (1993; 2006) definition of HPTs, a sentiment shard among participant responses. Thirty participants (P1, P2, P3, P5, P6, P7, P8, P10, P11, P13, P14, P16, P18, P20, P21, P22, P23, P25, P26, P27, P28, P30, P31, P32, P33, P34, P35, P36, P38, P39) identified team member skills and experiences as affecting team effectiveness. "People are central to success in all work environments" (P23); Humphrey and Aime (2014) similarly found that team members were a significant predictor of team performance. This sentiment was shared by another participant who noted that "one can accomplish [the] mission without process[es] and thing[s] (albeit more challenging) [sic], but one cannot do so without people" (P24).

Twenty participants (P1, P4, P5, P6, P7, P8, P10, P12, P21, P22, P23, P24 P27, P29, P30, P31, P34, P35, P36, P39) also noted the need for interdependence of team

member expertise; ten participants (P1, P3, P4, P8, P10, P12, P20, P21, P25, P34) highlighted the role of complementary skills. In one example of interdependence, a participant noted the presence of a "primary and a back-up" (P21) team member who provided a level of "redundancy [which] proved invaluable when a crisis or quick-turn [requirement] occurred" (P21). This participant "learned that one of the easiest ways to achieve success and boost morale is to foster a sense of ownership and independent thinking and allow people to excel" (P21).

Effective teams perceive their team members are necessary to the team's overall success (Emich, 2014). Similarly, participants in this study noted that they particularly valued team members who pursued continuous learning, according to eight participants (P2, P4, P6, P8, P9, P24, P35, P38); who were able to overcome resource constraints (P12, P14); who were persistent and overcame challenges, according to P11; and who were dedicated to self-improvement, according to P4. One participant recalled an interdependent team that

succeeded because of the work styles involved although the personalities mattered as well. We had different folks handling different parts of the total process. We had what I called 'starters,' then we had those took over and ran with it in the middle and then those who took it from them and finished it off. Putting together and utilizing everyone's strengths in what they were good at made a big difference. And I think it also contributed to everyone getting along so well—no one was stomping on anyone else's toes or getting in someone else's lane of responsibility. (P39)

Seventeen participants (P2, P3, P5, P7, P8, P9, P13, P15, P22, P24, P26, P27, P28, P30, P32, P33, P38) ascribed successful team experiences to collaboration and team members who possessed strong, internal or external collaborative networks that enabled them to meet goals aligned with the team's purpose. Additionally, ten participants (P3, P5, P8, P10, P13, P21, P22, P23, P25, P27) specifically emphasized the value of diversity. Team member diversity "fostered an environment that encouraged new ideas and allowed people to take turns leading the group in their area of expertise" (P21). Separately, team member capacity for autonomy or independence was also viewed as a positive factor of success teaming experiences, according to six participants (P5, P13, P14, P17, P21, P26).

Purposeful team member selection based on the member's knowledge, skills, and abilities has been positively correlated with effective team performance (Gardner, 2012a) and may contribute to ensuring complementary skills are present among team members (Edmondson, 2012). Similarly, in a DoD context, a team member's "longevity" (P2) or stable membership on the team (P24) also contributed to effective teaming experiences and outcomes, though it was perceived as sometimes difficult to achieve in a transient military environment (P8). Only four study participants (P5, P8, P10, P39) specifically identified hand-selection for a team as a particular contributing factor to team success.

In the best of circumstances, a team member's "individual perspective and experience" (P5) was optimized, though this was not always possible. A participant stated that "the most valuable resource a team has are its individual members, and when they feel that they are failing or the conditions within the team are not conducive to

success, they start looking for an escape hatch" (P1). This observation was shared by a separate participant who noted that when team members "hadn't been treated with respect...within a short period of time, their major effort was to get off that team. They would accept positions in all sorts of places just to get off that team, and that was sad but I could understand it" (P8). Another participant, P23, noted alignment between good leadership, collective team effort, and organizational impact and recalled that

effective leadership and grooming your people to succeed is not only rewarding, but leads your organization to greater success than the sum of the individuals.

This is best accomplished if the leader is altruistic and dedicated to team success—and gets his [or] her team to follow suit!

The role of leaders emerged among many responses, as will be further presented later in this chapter.

The purpose. HPTs enjoy a shared sense of purpose, goal identification, and approach to achieving those goals (Katzenbach & Smith, 1993; 2006). Thirty-two study participants (P1, P2, P3, P4, P5, P6, P8, P10, P11, P12, P13, P14, P15, P16, P18, P19, P21, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33, P34, P36, P37, P38, P39) specifically identified the need for team members to share a common mission, purpose, or goals among successful team experiences. Effective team alignment to purpose considers the context of team type and desired outcome rather than simply relying upon a successful team due to its members or long-term successful outcomes (Berlin, Carlström, & Sandberg, 2012), a finding shared in at least one participant's experience (P37).

Six participants (P1, P2, P4, P10, P29, P32) specifically identified a shared sense of purpose as foundational to team success. Another participant described it as a "desire to achieve our mission" (P8). One participant offered that the "shared sense of purpose is most important" (P1) to effective teaming. Team members "are committed to one another and the mission" (P32), in another participant's experience. Effective teams enjoyed a leader who "keep[s] the team on track and rall[ies] them behind a goal of some kind—a CLEAR [sic] goal...[that] members NEED TO READ [sic]" (P18). A team's purpose also contributed to a sense of team efficacy according to another participant, P29, who recalled, "I felt like I was making a difference" (P29). Another participant attributed an experience on an HPT to the "type of mission" (P37) the team performed.

In addition to a shared sense of purpose, team members agreed upon approaches to goal satisfaction through an "understanding of command [organizational] priorities...[a] sense of responsibility...[and an] understanding where the team fit into the organization" (P2). Goals were achievable particularly when guidance or expectations were outlined, according to seven participants (P1, P5, P12, P16, P22, P26, P36). "Clearly defined team and individual goals and objectives" (P5) and "decisive" (P26) leadership who "provided unambiguous guidance" (P26) also contributed to goal satiation and approach alignment. Time was considered a valuable resource when attempting to satisfy goals, according to 21 participants (P2, P5, P6, P7, P8, P11, P12, P14, P16, P18, P20, P22, P24, P27, P29, P30, P31, P32, P33, P38, P39). Adaptability among team members to meet shifting requirements (P27), or, feedback, according to eight participants (P1, P8, P10, P15, P16, P28, P32, P38), also contributed to keeping a

team focused on its purpose and goals. Feedback that was "timely and useful...good or bad" (P1) was particularly useful in helping the team to make necessary corrections.

Accountability for results. Team member accountability is another critical component of HPTs (Katzenbach & Smith, 2006). Eight participants (P1, P2, P4, P11, P13, P22, P29, P32) identified accountability as a contributor to satisfying mission or team goal requirements. One participant described a team environment suggestive of the presence of mutual accountability and recalled that "no one acted alone, and no one person was responsible for the success of [the] mission" (P30). A study participant, P15, recalled experiences in which specific performance metrics were identified. Others, alternatively, measured success by being able to identify visible results, according to four participants (P1, P10, P11, P19). Another participant conversely noted that poor leadership might contribute to a "fear of accountability" (P7) among team members. When noting the role of accountability as a component critical to teaming, one participant recalled that "successful teams throughout my DoD career have embodied all of those characteristics [shared sense of purpose, complementary skills, commitment to one another and exceed organizational goals as identified in IQ7, Appendix C] and more, specifically personal leadership, integrity, accountability, and a sense of camaraderie" (P22). This sense of camaraderie would also emerge as a theme related to team member commitment.

The commitment. Commitment at the organizational and personal levels is foundational to effective, HPTs (Katzenbach & Smith, 2006; Ray & Bronstein, 1995). Twenty-eight participants (P1, P2, P3, P4; P5; P6, P7; P8; P9; P11; P13; P14; P15; P16;

P20; P21; P22; P23; P24; P25; P26; P27; P28; P29; P30; P31; P32; P33) identified commitment as an aspect of team experiences; five participants (P1, P2, P4, P5, P30) specifically identified commitment to the mission. One participant described a team experience in which team members

knew we were all committed to the same immediate goal and to the overall goal...we knew each other's skill sets, including the less obvious ones and utilized them as appropriate...we trusted each other to do what needed to be done...and the chain-of-command trusted us enough to allow us to operate independently (no micromanagement) [sic], which increased the speed of response. (P14)

Another participant highlighted commitment by recalling team members were "motivated by the mission, willing to make personal sacrifices to do the job" (P1). This theme was noted in another response in which the participant offered that "success almost means you accept that you may never understand the entire 'picture' of what is happening...you never give up, and your leadership knows you have turned over every stone of information you have at the time" (P28). In another example, team members

suffered through a lot of long nights, extra work, and missed engagements with family and friends. I can't say that our efforts were complaint-free or devoid of aggravation and bickering, but as a unit and as friends, we knew that we had to work together to ensure we met the standards. It's easy for people to decide that they're only willing to put forth the minimum and claim, 'it's not in my job description,' or 'I have other commitments.' I feel that if you have a solid team

and you treat your subordinates with respect, compassion, and empathy, as well as instilling in them a sense of ownership in their unit, they will be more willing to put forth the extra effort to ensure success. (P30)

Team member interpersonal commitment can also affect a team's ability to overcome challenges to its success (Katzenbach & Smith, 2006); teams may thus be well served to identify challenges to success where possible to remedy them.

Challenges to success. Participant responses reflected the many challenges to becoming HPTs, a finding identified in literature that emphasizes the rarity of HPTs (de Waal, 2010; Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 2006; Ray & Bronstein, 1995). As one study participant noted, "Like winning, it is a team effort to fail" (P38). Thirty-five participants (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P21, P22, P23, P24, P26, P27, P28, P29, P30, P31, P33, P34, P35, P36, P37, P38) identified leadership (good or poor) as having an impact on effective teaming. Of these, nineteen participants (P1, P3, P4, P6, P8, P9, P10, P13, P14, P15, P16, P18, P21, P22, P23, P24, P31, P34, P38) specifically identified poor leadership as a contributor to less successful team experiences. Team member limitations also contributed to less successful team experiences, according to 19 participants (P1, P2, P4, P5, P6, P7, P8, P9, P10, P16, P19, P22, P23, P25, P26, P28, P35, P37, P38), while 13 participants (P1, P7, P8, P9, P18, P20, P21, P23, P24, P27, P31, P35, P38) identified a lack of clear guidance on the team's purpose or goals as a contributing factor to less successful team experiences. Four participants (P5, P15, P16, P22)

identified the organizational context in which the team existed as affecting team outcomes.

Challenges: Leadership. A team's leader can affect the entire team (Akdemir, Erdem, & Polat, 2010). HPT members enjoy shared leadership dynamics (Katzenbach & Smith, 2006). Conversely, a hierarchical leadership dynamic can affect team outcomes, according to 28 study participants (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P12, P13, P14, P15, P16, P18, P21, P22, P23, P27, P29, P30, P31, P33, P34, P35, P37, P38). Leadership is a powerful responsibility, according to one participant, P8; another participant ascribed a "direct correlation" (P29) between leadership and the "success (or 'failure') [sic] of DoD teams" (P29). The participant went on to note "it often feels like 'bad' leadership (toxic?) [sic] is rewarded, and makes life for those successful teams and individuals harder" (P29). Another participant identified leadership as "personalitybased" (P10). A poor leader was one who would "never really give you clear guidance" (P10) and then later "would reign you in" (P10), which negatively impacted team morale because team members "felt like we weren't performing" (P10). Similarly, another participant noted that "personality plays a large part in team dynamics. A toxic leader or team member can destroy a high-performing team" (P12).

Leadership challenges also emerged from a "weak or absent leader" (P1), which the participant noted was also a self-failing at times. Other identified leadership challenges included a "lack of a clear command structure" (P34); leadership turnover, according to two participants (P3, P6); lack of leadership skills or training, according to two other participants (P8, P31); "ineffective decision-making" (P9); "inability to provide

clear guidance" (P38); or "inconsistent" (P21) leadership. A leader's vulnerability to work requirement "overload" (P8) or a perception they were unsuited for the role, according to P10, also affected negatively team success. Another participant recalled a leader who "did not understand and was not interested in the details of what the mission required or the breakdown in team dynamics" (P22). Additionally, leaders were perceived to inhibit team success when these leaders were constrained by the organization (P27) or lacked senior or organizational support, according to four participants (P5, P15, P16, P30).

Negative leadership behaviors also contributed to unsuccessful team experiences or failures, according to five participants (P8, P9, P13, P22, P23). "Micromanag[ing]" (P9) or "self-serving" (P22) leaders negatively affected teams. Participants cited a leader's "lack of respect" (P8) or lack of "people skills" (P23) as contributing to less successful experiences. Another participant recalled a team that "endured a toxic work environment and inability to progress towards its goals. The toxic leader routinely undervalued and undermined [the] team, which led to exceptionally low morale and a lack of commitment to the organizational goals" (P13).

A team leader-supervisor's lack of engagement in the team and "self-promoting" (P4) nature also contributed to a team's lack of success, particularly when the supervisor did not care about the team and also demonstrated very little care or respect for the mission. This supervisor was rarely present at work and was disengaged from the team whenever this person was at work. This seemed to perpetuate and almost poison the rest of the team. People did not trust one

another... of course there were a few people who still were engaged and committed. (P4)

Although this type of environment did not permeate numerous team member experiences, another participant noted leadership failure led to correlated dysfunction in a team because team members

all felt under-appreciated as they [team leaders] never really passed down relevant information...they never really showed any appreciation to us. They tried to use fear as a motivator and awards and other appreciations seemed to be arbitrary or given to the leadership favorites....We had dysfunctional leaders whom no one trusted and honestly didn't seem to know how to do their jobs correctly. (Why should we follow them?) [sic] (P23)

One participant noted "insecure, weak leaders [who] rush to judgment when teammates make mistakes, placing blame and even accusing them of being apathetic or guilty of willful negligence" (P38) led to a team's inability to achieve success. The participant went on to state that "a work environment is not hostile just because a difficult problem is raising performance pressure...multiple tasks with competing deadlines...[I]t is hostile when incompetent individuals rise to leadership positions they are ill-prepared and often incapable of handling" (P38).

Another participant recalled that some leaders set the goals "too high—as if they are unattainable" (P29). The participant additionally noted participation in "a few projects and programs where the established goals were met and, to my viewpoint, exceeded, but then leadership expected more and didn't seem to be satisfied with those

'exceeded' goals" (P29). Other examples of less successful team experiences centered on a lack of leaders (P23), leaders who lacked "management skills to efficiently lead the team" (P2), or leaders who were unavailable, according to one participant who noted that "we needed help and didn't get it and, as a result, we were plagued by indecision and lacked ownership of the task" (P7). Poor leaders exhibited a "lack of trust" (P8); were not "strong" (P18); possessed a "don't care attitude" (P37), or offered "tirades [versus] thoughtful feedback for improving the probability of mission success" (P38). On a "less successful team" (P21), a participant recalled that team members were "rarely asked for [their] opinion[s]...almost always ignored...[and] told how to get from A to B by someone who knew much less about the issue, the [organization], and the process" (P21), leaving the participant to feel "simply...like a cog in a wheel" (P21).

The role of leader-member communication was noted by some as affecting a team's ability to meet the high-performing component of shared sense of purpose, mission, or goals. Some leaders provided unclear or conflicting guidance or failed to clearly articulate expectations, according to five participants (P12, P14, P27, P33, P35), or, according to another participant, P38, failed to identify a clear mission. Conversely, a lack of a "clear command structure" (P34) contributed to one team's inability to meet its goals: "...without the clear command structure, it would either take too long to get consensus...or guidance would simply vary depending on the individual leader" (P34).

Other participants found success difficult to attain when organizational leadership had "unreasonable expectations that the team would meet both routine deadlines and new, short-fused requirements without allowing for extra time to complete both" (P16).

One participant "tried to identify a leader [the team] could turn to but [they] could never find one that was committed to [the team]" (P7). The participant kept searching and on another team was "fortunate to find such a leader, and the reason for the leader's commitment [was] a clear understanding of [the] team's responsibilities and roles in the organization, and the value [the team could] add to the organization's goals" (P7).

Challenges: team members. Belbin's (2009) team member roles underscore the correlation between the effectiveness of well functioning team members with appropriately defined roles, skills, and training. Similarly, in the DoD context, team members who lacked requisite knowledge, experience, or positive attitude were perceived an impediment to HPTs, according to 16 participants (P2, P4, P6, P7, P8, P9, P19, P22, P23, P24, P31, P32, P35, P37, P38, P39). Eight study participants (P6, P9, P22, P23, P24, P31, P37, P38) specifically identified a team member's lack of training while another participant, P8, identified a team member's general lack of procedural knowledge as impediments to success. Four participants (P2, P32, P35, P37) specifically identified a team member's lack of experience as a limiting factor to a team's inability to meet requirements.

Team member attitude also emerged as a theme. "Disorganized, self-serving, uncommunicative" (P22) team members who "had [a] different team mindset or [sense of] priority" (P19) or who lacked trust, according to P4, also led to less effective teaming. One participant recalled a team in which there were "too many people wanting to lead, and they lost focus on the whole point, which was to get the task done" (P39). The participant went on to ascribe the team's inability to meet its goals to team members who

were "more about egos and who's going to get which bullet statements on their [evaluations]. Very selfishly driven" (P39).

Team member deficiencies were also noted among some members with a "poor sense of teamwork" (P16) or who exhibited a "lack of commitment to meeting [the] goal" (P14). One participant, P7, identified a team member's lack of accountability for a task as an example of a factor contributing to a less successful experience. Teams whose members were neither "intellectually curious nor [had the] capacity to avoid self-think or groupthink" (P28) were identified as diminishing team success. Some team members who prioritized an individual "desire to please the person's rater [supervisor]" (P28) or were not motivated by the mission, according to three participants (P1, P10, P26), also contributed to a negative environment.

Team member attitude also affected intra-team interactions. Two participants (P22, P23) noted experiences where team leaders or other team members caused members to feel "unvalued" (P22, P23) or unheard (P17, P25) by leaders or other team members. Another participant, P8, recalled an annual review when the team leader delivered the review while sitting with both feet up on a desk such that the participant had to look at the soles of the team leader's shoes the entire time.

Aubé and Rousseau (2011) found that knowing team member personalities could improve team member effectiveness. The opportunity to test for personalities as a means of achieving complementary skills, however, may be difficult in a DoD context. "Complementary skills are important... we had this in [my] most effective team...but I

don't remember this being explicitly measured (through individual diagnostic test, for instance) or applied ('Jones, you are a holistic thinker, so you'll handle task x')" (P1).

Another participant highlighted the challenge of team member assessments to determine fit by noting that

if leaders can't choose the members, it's unlikely these characteristics will be realized and the team will exceed expectations. Sometimes DoD team members are appointed and the personal traits of these members determine the extent these [HPT] characteristics are realized....If 'voluntold' [when a member is *told* they will *volunteer* for a job or position], they may not put forth the effort to share a sense of purpose or establish commitment to one another. Whether they have complementary skills will not even be evaluated. Sharing a sense of purpose and being committed to one another require the members to put forth some effort. (P6)

The challenges of purposeful team member selection were identified by another participant who noted that when a team is hand-selected the "people putting the team together—because sometimes to meet mission you may need to pull from different sections within an office—need to understand the dynamics of differing personalities and work styles and put them to their best use" (P39). Failure to consider these aspects can impact team performance, according to the participant who noted that "it often doesn't work when the members of a team are picked willy-nilly or are selected because they won't be missed from the work section, to be polite about it" (P39).

Team member personalities also contributed to unsuccessful team experiences. "Toxic personalities, pettiness, and disrespect shred unit [group] cohesion and inhibit the team's ability to meet its goals" (P12). Similarly, teams were less successful when "substandard" (P1) team member work was tolerated or when "effective performers [were] disproportionately tasked" (P1). Another participant recalled an unsuccessful team with "vast experience and knowledge…[but] failed to develop concise deliverables [i.e. output] in a timely fashion" (P2).

HPTs are able to strike a balance between knowledge and innovation by considering the effects of team member stability, defined as longevity on the team (Katzenbach & Smith, 2006). A participant offered a different perspective about challenges in achieving complementary skills among DoD team members and noted that the most successful teams have individuals who possess complementary skills, but that is inconsistent across DoD. This is partly due to the transient nature of the job for military members. They only have a certain amount of time at any posting, so they have to quickly bond with teammates and learn the new area of interest for which they are responsible. Since it generally takes approximately 18 months to get up to speed ...it can create significant variances between incoming and outgoing military members. When you add civilians into the mix, the experience levels and skill sets can vary considerably. Achieving a complementary balance of skills can be extremely difficult. (P34)

When describing the opportunities and challenges of high team member turnover, one participant stated that "one of the worst things about working in DoD and one of the

cool things is that you always get a new team" (P10). The participant went on to state that a rotational team member can "actually add a lot of freshness to the team" (P10) and such an approach "brings in new talent all the time" (P10). Another participant also expressed a preference for a balance between rotational team members and hand-picked personnel and noted that "if all I'm doing is bringing in people I know, then I would tend to worry over the longer-term about perhaps some kind of insularity, lack of fresh ideas, lack of fresh perspective" (P27). Still another participant echoed this by noting that in addition to subject matter expertise and "relevant skills" (P36), cognitive and experiential diversity may be helpful. The participant offered, "experience is clearly needed, but also, getting someone who is new, or may be junior, provides a differing perspective that adds to the mix" (P36).

This balance between existing team members who possess longevity and the addition of new team members was perceived by one participant as being difficult because you "don't know what you're getting" (P27) or how that person may help address "key elements of your structure" (P27). In such cases, it was necessary to "sit down, meet the [new] person, talk to them, and interact with them and see what their work ethic is, see what their cognitive strengths and weaknesses are" (P27). Such reviews may cause a need to "reorganize, remission, reportfolio [give a different account or focus area to] certain persons on a team" (P27) because having access to "the right person in the right decision at the right time is critical" (P27). One participant noted that team lead stability was also important, "[L]eaders set the conditions for success...[they] must have 'time' to implement and sustain change (2 years optimum). Constant

leadership turnovers exacerbate instability, lower morale, inhibit change, impede progress, and degrade mission" (P24). Another participant looked to organizations to recruit towards HPT status, encouraging them to

start with leadership and most of the time, personnel will follow. If every organization would hire personnel that possessed these characteristics [e.g. shared sense of purpose, complementary skills, commitment to one another, ability to exceed organizational goals], they would be more successful. However, I believe you would only need a few to rub off on the others and then they will become contagious. (P37)

Another participant noted the difficulty of cultivating the right balance of informed and fresh team member perspectives, particularly "if you're the kind of organization that won't offload...the guy dragging, holding [down] the team" (P10). When asked how to remedy teams with less successful team members, the participant noted that "the military guys, they leave after awhile....The bigger issues is with civilian long-term longevity; it's almost impossible to move or discipline entrenched civilians" (P10). Another participant suggested, "peer pressure in high-performing teams is normally sufficient to force nonperformers to rise above mediocrity" (P38). This type of "peer pressure" (P38), which leads to improved output, constitutes a type of accountability, a key component of a HPT characteristic (Katzenbach & Smith, 2006).

Static, seasoned team members who did not move often yielded a different form of distinct challenge, particularly in "small organizations [that] become really reliant on one or two people who almost become central points of failure" (P10). Over-reliance

upon one or two team members led to failure to plan properly for eventual turnover, according to one participant who noted that

it's very nice to have civilians because they provide all that continuity and sometimes long-term guidance and strategic focus. The military guys contribute while they're there and they all do very well...but then what happens is one of them leaves, and there's not a good back-up plan or a good hand-off, or one of the guys has been handling something just because of the small nature of the group. It really hurt the rest of the team until we got somebody in [as a replacement for the team member who left] that was better. (P10)

Succession planning was perceived as routinely lacking. According to one participant, "Most organizations don't have a good redundant plan to cover all their equity" (P10). Succession planning is important to a team's effectiveness (Akdemir, Erdem, & Polat, 2010), however, and can help ensure commitment to the organization's long-term strategy is sustained through periods of team member turnover.

Challenges: team member commitment. Eighteen participants (P1, P2, P3, P4, P6, P7, P8, P11, P14, P15, P21, P22, P27, P29, P30, P32, P33, P34) identified specific examples of team members who were committed to the mission or other teammates. One participant, however, recalled team experiences with DoD civilians who had "little motivation to go above and beyond or perform anything outside the scope of their current tasks" (P10). The participant described this experience as unusual and ascribed it to the fact that those particular civilians "felt under-appreciated by the [team leader] (who made it clear he had disdain for DoD civilians) and also by the military personnel (who were

immature and had no experience working with DoD civilians)" (P10). The participant, P10, recalled subsequent positive teaming experiences working in diverse military and civilian environments. Conversely, at least one participant with numerous DoD experiences stated, "I believe most individuals who choose to work for DoD understand that to accomplish the mission objectives, whatever they may be, individuals benefit from being committed to one another" (P34).

Challenges: purpose. A shared sense of purpose, goal satisfaction, and approach are critical to HPTs (Katzenbach & Smith, 2006). Unsuccessful team experiences were due to unclear, lacking, ambiguous, conflicting, or contradictory guidance about the mission, purpose, or output requirements, according to 12 participants (P1, P8, P9, P20, P21, P23, P24, P27, P31, P32, P35, P38). One participant described this lack of clarity as leading to "all thrust and no vector" (P35), meaning a lot of effort or force without a lot of purposeful direction. Failure to conduct early strategy formulation discussions about the goal or purpose (P18) and, separately, unclear or unspecific performance expectations (P1, P18), including deadlines (P27) and a lack of "viable, measurable results" (P1) also contributed to failure. Other factors contributing to a team's inability to meet its goals included a lack of common purpose (P5, P6) or leader-provided "vision" (P27) or lack of focus on the goal (P18). Two participants (P1, P38) specifically recalled experiences in which timely feedback was necessary and important to help the team self-correct to meet requirements.

Challenges: organizational context. A team's organizational environment may affect performance (Shafritz, Ott, & Jang, 2011), an assertion shared by two study

participants (P10, P11) who similarly noted a team's environment at times contributed to a team's inability to meet its goals. Organizations may try to develop a vision or articulate the organization's values to its employees, but one participant, P10, cautioned such an approach is challenged if not communicated well. "I think lots of organizations have great ideas, but [how can organizations] communicate that to their upper leaders, their middle leaders, their low level leaders so that the workforce can actually feel like they're value added?" (P10). The participant continued that organizations "come up with all of these great ideas but I don't know how that translates for the common worker at the ground level" (P10).

Another participant reflected on organizational context by stating, "Clearly, the bureaucratic environment stifles initiative and requires extraordinary determination to stay the course" (P11). The participant noted the best way to overcome such inertia and to achieve necessary efficiencies was through "persistence" (P11). This was described as a need to "keep pressing and pressing and pressing until we make these efficiencies happen" (P11) and to garner "a lot more solid commitment from the senior management...[so] that they would not allow anything to get in the way of moving ahead" (P11). Participants also identified other organizational contexts that were deterrents to success, such as a "chaotic environment" (P22); one in which a lack of collaboration internally or externally to the team, according to three participants (P2, P32, P34); or where poor communication was allowed to persist, according to three participants (P6, P22, P32).

Resource-constrained environments affected some teams' successful satisfaction of requirements. One participant noted resources were dictated by a "limited" (P19) DoD budget. Several related causes of less successful team experiences were offered, such as a lack of staff, time, or other resources, according to six participants (P9, P19, P24, P27, P29, P38, P39). Seven participants (P5, P9, P29, P32, P34, P35, P38) identified the absence of experienced personnel as a factor that negatively affected team success. Other limiting factors to successful team experiences included a lack of time, according to five participants (P5, P16, P27, P29, P32); training, according to four participants (P2, P22, P23, P27); a lack of appropriate authority to execute their missions, according to four participants (P5, P14, P24, P36); or teams that failed to follow proper procedures, according to one participant, P37. Other resources that constrained team success included a lack of "funding" (P30) or "access to information" (P28) that could help the team to meet its requirements.

Administrative support, which Edmondson (2012) noted was necessary for successful team performance, was also a noted deficiency in one team, according to a participant, P18. Space (facilities) and technology ("systems" (P5), "IT" (P21)) were notably absent when teams were less successful, according to two participants (P5, P21). One participant noted that the team's "morale plummeted" (P3) when resources were removed from the team in favor of another project.

Conversely, being fully resourced was not necessary for success in all experiences. One participant recalled that

most of the time on successful teams, we still struggled for resources. I can't honestly say that being fully resourced ultimately mattered. In fact, in several instances, lack of resources caused us to create time saving/resource enabling methodologies. (P15)

Similarly, another participant noted, "the resources, personnel-funding-facilities…were barely adequate for the [requirements] and the allocation was stretched out over a period far exceeding [a] feasible schedule. That said, reality impinges, and the team accepted that it just needed to keep pressing ahead" (P11).

An organizational context in which multiple goals (P6) or "too many projects or programs" (P29) were present was perceived to affect negatively team success. One participant, P19, however, perceived the stress associated with such contexts could lead to positive outcomes and observed that

stress is one of the disadvantages when it comes to having a goal. You put countless hours in[to] achieving it [the goal] and seeing it done puts the team at ease and in a completely different atmosphere and mood. After achieving its goal, the team is confident anything can be done if the team works together. It's an awesome feeling when a goal is accomplished, especially by a team.

Such successes, particularly if experienced early in a team's time together, can improve team efficacy and overall cohesion (Katzenbach & Smith, 2006).

Challenges: team failure. Some teams still failed to meet goals, however, even though they were able to identify the presence of adequate time (P39); personnel (P10, P11, P26), even additional personnel (P39); funding (P11); supplies (P39); or equipment

(P26). In one case, resources were "more than sufficient" (P13), but the team still failed to achieve success. Conversely, three other participants (P15, P19, P20) did not identify any significant differences between when a team exceeded or, conversely, failed to achieve team goals. One participant, P21, recalled that training opportunities remained consistent even if other resources were lacking or reduced.

A participant, P36, noted that failure was self-induced in some cases. In other examples, participants pointed to a lack of self-initiated communication with others (P20) or loss of manpower contributing to reduced collaboration (P9). Another participant ascribed failure to consider "important" (P25) related issues or identify "alternative courses of action" (P25) as a challenge to success. As discussed in the next several paragraphs, team member focus on mission or outcome overcame many resource and other challenges.

Challenges: solutions. The mission and goals of the DoD drives its personnel to seek solutions to challenges (Hagel, 2013). Similarly, several participants offered options to reduce noted inconsistences among leadership experiences, skills, and training. For example, one participant encouraged individuals to take responsibility for development and noted that "leaders must seek to capitalize on every opportunity for growth, and…chart a path to advance organizational and personnel development" (P13). "Peer mentoring" (P10) was also found to be effective in cultivating leaders and remedying team challenges.

Disagreement emerged, however, when considering approaches to training and experiential remedies to deficient leadership. Two participants (P10, P27) noted that

military training programs and experiences had a positive effect on their teaming experiences. Conversely, one participant did "not believe the military 'has cracked the nut' on balancing teamwork and promoting leaders. In many cases both qualities appear incongruent to one another" (P28). The participant encouraged leaders "who want the very best from his or her team [to] protect [the team's] ability to produce quality [outputs], ensure they [the team] have the right training and technology, and offer a trusting and light approach as they stretch the limits of their curiosity" (P28). Another participant differentiated between military and civilian training by noting that "…the military has excelled at building and promoting leadership. Unfortunately, the Federal Civil Service has not been as effective in developing leaders and overall productivity, team-building and team success has suffered" (P30).

Team member "persisten[ce] and resiliency" (P19) to meet the goal was also noted as important to remedying less successful teaming experiences as was asking management to provide "amplifying information" (P20) to help satisfy guidance ambiguities. One participant recalled the "times the team managed to move past those struggles [associated with the lack of a clear command structure]...was typically only due to the individuals involved putting their differences aside for the good of the mission and going point-to-point [directly to other team members or stakeholders]" (P34).

Foreshadowing RQ4, a participant noted that reviewing "lessons learned" (P24) corrected formerly unsuccessful team experiences because the review led to "revised and codified processes (best practices)" (P24); leaders "implemented [a] training program...and then reorganize[d the team] around [a] 'defined' mission set" (P24).

Summary: RQ1. Participants in this study identified team experiences in DoD office-based environments that exhibited characteristics of HPTs, such as complementary or interdependent team member expertise (P1, P3, P4, P5, P6, P7, P8, P10, P12, P20, P21, P22, P23, P24, P25, P27, P29, P30, P31, P34, P35, P36, P39), a shared sense of purpose (P1, P2, P3, P4, P5, P6, P8, P10, P11, P12, P13, P14, P15, P16, P18, P19, P21, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33, P34, P36, P37, P38, P39), and commitment to the team and its mission (P1, P2, P3, P4, P5, P6, P7, P8, P9, P11, P13, P14, P15, P16, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33). Eight participants (P1, P2, P4, P11, P13, P22, P29, P32) specifically identified accountability, a key component of Katzenbach and Smith's (2006) definition of HPTs. DoD team member experiences varied, depending upon team leaders, team members, focus on goals or desired outcomes, organizational contexts, and resource constraints. In keeping with the literature findings that HPTs are rare (Katzenbach & Smith, 206), no study participant stated that all of his or her team experiences reached the status of HPTs. In the next section, I present participant responses to RQ2 in which I sought to examine how DoD team members experienced HPTs and how these experiences differed from other, non-high-performing teaming experiences.

RQ2: Experiencing Team Excellence

Having identified the presence of HPTs among study participant experiences, I expanded upon RQ1 by asking, in RQ2, *how* DoD team members in office-based environments experienced working on teams exhibiting characteristics of HPTs, such as interdependent team members with complementary skills, a shared sense of purpose,

mutual accountability, and commitment to the mission and one another (Katzenbach & Smith, 1993; 2006). A recent study identified team member expertise as a factor of successful teaming (Aime, Humphrey, Derue, & Paul, 2014), a finding shared among responses to this study (P1, P2, P3, P5, P6, P7, P8, P10, P11, P13, P14, P16, P18, P20, P21, P22, P23, P25, P26, P27, P28, P30, P31, P32, P33, P34, P35, P36, P38, P39). The data collected during this study also suggested that public sector DoD team members experienced a keen sense of shared purpose or mission (P1, P2, P3, P4, P5, P6, P8, P10, P11, P12, P13, P14, P15, P16, P18, P19, P21, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33, P34, P36, P37, P38, P39), as will be described further below. Additionally, 28 participants (P1, P2, P3, P4, P5, P6, P7, P8, P9, P11, P13, P14, P15, P16, P21, P22, P23, P24, P25, P26, P27, P29, P30, P31, P32, P33, P34, P35) identified the role of commitment to one another or the organization's mission (Katzenbach & Smith, 2006). Lastly, 18 participants (P3, P4, P5, P6, P11, P13, P15, P16, P18, P19, P25, P26, P27, P29, P30, P33, P37, P39) recalled examples of team experiences in which the team worked to satisfy goals, which Sherif (1958) identified as a factor that contributed to defusing conflict (Sherif, 1958).

In Figure 4, I present the frequency of participant responses that aligned with codes comprising the Team Member coding category. I observed Team Member category codes among participant responses to IQs 1, 2, 3, 3a, 4, 5, 7, and 8, which were crafted to address RQs 1 and 2.

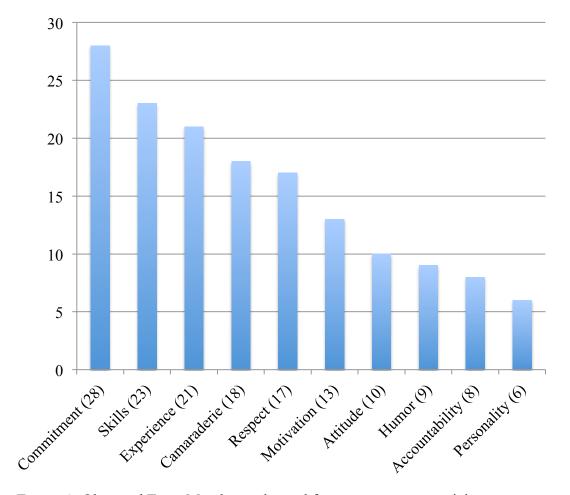


Figure 4. Observed Team Member codes and frequency among participant responses (Appendix E, Table E2).

Experiencing high-performance teams. Twenty-five participants (P1, P4, P5, P6, P7, P8, P9, P11, P12, P13, P14, P16, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P31, P32, P33) responded positively when asked if they had served on an HPT; four participants (P8, P10, P18, P22) provided deeper descriptions of these experiences which addressed all aspects of Katzenbach and Smith's (1993, 2006) definition of HPTs:

- [A] small number of people
- with complementary skills...

- who are committed to a common purpose, set of performance goals, and approach
- for which they hold themselves mutually accountable (Katzenbach & Smith, 1993, p. 112). . .
- [and] who are deeply committed to one another's personal growth and success. (Katzenbach & Smith, 2006, p. 92)

In Figure 5, I present the frequency of participant responses that aligned with codes comprising the Team Awareness coding category. Team Awareness category codes were observed among participant responses to IQs 1, 2, 3, 3a, 4, 7, and 8, which were crafted to address RQs 1, 2, and 3.

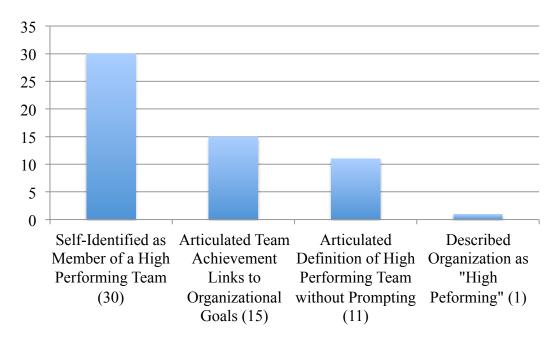


Figure 5. Observed Team Awareness codes and frequency among participant responses (Appendix E, Table E3).

One participant described a small team whose members were hand-selected from other teams in which they served as "leaders" (P8) of those teams. The participant recalled aspects of shared leadership (Katzenbach & Smith, 2006) among team members who "all wielded a personal authority [that] was not overwhelming...not a competition of egos like you might get in some places if you pulled a bunch of people who are used to being boss or used to being in charge" (P8). The team members had a "very specific mission focus" (P8), possessed "unique skillsets, but very different personalities" (P8), and were "all open-minded to what the other people on the team had to say" (P8).

The participant attributed the "excellent experience [on this] extraordinary team" (P8) to a number of things, including the team's interdependence and commitment to one another. The team members were "strong people [who provided one another] productive criticism [but] there was no *macho* or '*macha*' [sic] on that team" (P8). The participant continued that "not a single one was a 'look-at-me, look-at-me' [type], which may very well have been why they were selected—because they could work on a team" (P8). Additionally, "none [of the team members] had anything to prove…team members were aware of what each other was doing and…they functioned to help one another" (P8). Team members recognized when a teammate had a "short deadline [and] would offer…to help [without being asked]. It didn't take a lot of verbal communication because we just seemed to understand each other well enough and where we were going" (P8).

The team's commitment superseded expectations of reward; team members were "told because of the nature of that team that there would be 'no gold stars'" (P8). The participant noted the team was

asked to perform a function that would help with the mission, and none of us were getting a promotion, and we probably wouldn't be getting a pat on the back; nobody would know what we'd done, and they [the team] were all in...because it was a job that had to be done. (P8)

The team experience was relatively short, however, because "taking a strong person, a strong contributor from each of the other teams...weakened those [other] teams" (P8). The team members were described as "successful when they went back into the other teams" (P8).

Another participant described a small team experience as "high-performing" (P10), due in part to the "close" team members whom the participant perceived as focused on a shared purpose and "happy because they were doing something that really mattered" (P10). Team members were hand-selected and the team "had a lot of *caché*" (P10). The team members possessed distinct skills and roles that created a unique environment in which "everyone just got along really well, very congenial…zero competition" (P10). The team members were also committed to helping one another, "…everybody tried to make up for anybody that had a weakness or anybody who was struggling; everybody would just offload and shift the load to make the team stay stabilized and producing good output" (P10).

The team's contributions made an impact at the highest levels of the organization, according to the participant, P10, and spurred mutual accountability. Positive feedback from the "[senior decision-maker]...would just make everyone work harder and motivate them to work harder even though they would be crushed under requirements in a small

shop" (P10). The participant "never regretted going to work" (P10) because the participant "always felt value added...[and] empowered" (P10).

In a third example, a participant described "the most highly successful team I ever worked on" (P18) as a team who "formed ourselves with a common goal, no upper management support" (P18). Team members were "experts" (P18) who volunteered to take on duties and would "immediately address...failure" (P18). The team exhibited accountability in its expectation of excellence from one another, "We had interlopers that were distracters and hard to deal with, but the main team banded together and either disinvited or reported to [the parent organization] that their troublemakers were not welcome" (P18). The team was not resourced with anything other than "time" (P18); the team went on to set national-level "standards" (P18) that are still in use more than 15 years later. The participant described the experience positively, but struggled to define what made the team so successful and asked,

Was it because we had no time limit? Was it the vision and goal that were clear? Was it because upper management had no idea what we were doing?! [sic] Or was it the internal leadership/vision and the sharing of responsibilities that made it work? I don't know. It could have been serendipity. I almost believe it was. The right people at the right time. But time is a big factor. Time to share, time to see each other's faces, time to brainstorm and argue and time to document, time to change course and make mistakes. Time to get rid of dead wood...Time and permission to talk freely with other organizations and people outside your cubicle.

Time to attend technical conference[s] outside the DoD to get new ideas. Time to network with fellow colleagues. It really is about time and personalities. (P18)

The participant underscored the uniqueness and rarity of HPTs when the participant compared the positive team experience and the team's impacts with a less successful one, noting that "to work on a team and provide a report that goes nowhere and changes nothing is probably the biggest disappointment" (P18).

Another participant recalled a newly formed team that exceeded the goal by finishing the entire project, including each individual segment, ahead of schedule. What made the team successful was that everyone completely understood the role they played, why their role was required for success, and the expectation that we would only be successful if each individual executed their role flawlessly. We had extensive pre-coordination; one of the key components was redundancy—everyone knew the ins and outs of their role and at least one other role so each of us could pitch in and pick up slack as needed.

Additionally, we had top cover and buy-in from management. Another thing that enabled our success was that there was no rank or ego—everyone from a[n]...E-2 [junior enlisted] to a[n]...O-6 [senior officer] did anything that was needed—from moving boxes to handling communication hurdles. (P22)

Turning to the specific aspects of how DoD team members experienced HPTs in their organizations, participants provided insights into the nature of DoD HPT dynamics, such as the people, purpose, commitment, and outcomes. Unanticipated themes emerged from the data, including the significant number of participant responses addressing the role of leaders, and, separately, the role of humor among team members.

The people. When recalling specific examples of perceived high-performing DoD teams, nine participants (P1, P4, P8, P13, P21, P25, P28, P32, P38) identified team members who possessed requisite skills and experiences. Even when "team members possess starkly different backgrounds and experiences" (P32), they were able to "lead [their] organization on a national level" (P32) at a "level of impact [that] routinely surprises new members" (P32). Another participant noted the importance of

a sense of purpose... ensuring teammates are not cookie cutouts of one another, and a desire to [do] good work is critical to success...[and] central to successful teams I've had the privilege to be a part of. I would also add respect and humor to this list. Especially humor, which I believe has not been appropriately explored on [DoD] teams. Share[d] experiences and feeling 'safe' when leveraging humor is key to building trust and a meaningful team. (P28)

At least one team leader was able to help teams determine fit when they "worked with [the team] to determine the skill sets we possessed and level of experience" (P21). The participant noted the team leader used the information to "pair us up with similar [co-workers]...we all worked different parts of the problem simultaneously then we came together as a team to share and bounce ideas off each other" (P21). Some teams were able to internally determine and reconcile team member capabilities, cultivating a high-performing cell within the broader construct (P30). One participant recalled that

since we enjoyed each other's strengths and accepted each other's weaknesses, we developed a system that allowed for all to succeed. Those that did not subscribe to this quickly found themselves on the outside...not that they were ostracized or shunned, but the organization simply chose to let them be. Productivity remained high because the committed members worked to pick-up the slack to ensure overall team success and mission accomplishment. (P30)

Beyond "top notch" (P25) expertise, being "very proactive in their approach and willing to try new ideas" (P25). Another participant highlighted the impact of team member attitude and recalled that

motivated team members—regardless of rank or expertise, motivation and sense of purpose always seemed to make all team members take ownership of their task and mission, and push hard to achieve (and over-achieve) [sic] their goals...there are so many variables to a team...but having all these things listed [in interview question 7, Appendix C], plus a strong leader and motivated members really helps to give a team the winning edge. (P10)

Another participant remembered "a common bond and no competition between us....We were loyal to the team, willing to share expertise and ideas, and able to develop a common understanding and vision. We did lack a leader, but we found ourselves leading collectively and working collaboratively" (P7). Other participants described their own attitudes as being "fortunate [to be a member of] effective [teams] in DoD and the Civilian sector" (P30) or considering it a "privilege [to be a member of] successful [DoD] teams" (P28).

An egalitarian approach, according to seven participants (P3, P8, P10, P12, P20, P25, P29), allowed teams to ensure they fully employed the benefits of the complementary skills identified among team members. Team members were treated "as equals" (P10) and "peers...not as a certain grade level or having a certain level (years) [sic] of experience" (P29). Team member interdependence was achieved when team members "learned each other's jobs so full cover was possible" (P8), "cover[ed] for one another when needed" (P29) and "played off each other's strengths to overcome weaknesses" (P12). One participant recalled that "each of my team members had a specific role to play...my team would dissect tasking [organizational requirements] according to their individual strengths" (P20). Another noted the team "relished the challenge of the work [and] felt that we were part of something special" (P1).

Team member treatment of one another appeared as a theme among several responses. Team members trusted one another, according to sixteen participants (P1, P4, P5, P7, P8, P11, P13, P14, P18, P24, P26, P27, P28, P35, P37, P38), and treated one another "with dignity" (P13). Team members showed support to one another, according to five participants (P7, P9, P18, P23, P32), such as when "selling their ideas to upper management" (P18) or by "actively seek[ing] ways to help each other and the team succeed" (P32). Participants described teams where "everyone felt they were a valued team member" (P10), where their "skills and expertise [were] valued" (P13) and where team members were "accepted as being a top-notch team member from day one" (P10).

Seventeen participants (P1, P4, P7, P8, P9, P12, P13, P18, P23, P24, P26, P28, P30, P31, P37, P38, P39) identified team member respect for one another as a component

of effective team experiences. As one participant noted, the team members "treated one another with respect, of course, as you'd expect from any decent team" (P31). Respect also showed itself in many ways, including valuing and being considerate of others' inputs, according to four participants (P4, P5, P18, P25), and creating environments where "all ideas were considered" (P26), according to another participant. Still another participant noted this was possible because "no one person had a legitimate claim as to 'how it's done here.' Each [team member] brought concepts and ideas to the team of how it could best accomplish its mission and inter-team dialogue was very open and merit-based" (P27).

Team members "saw the potential for their success and how it could help the [organization]" (P36) and were "always looking for creative solutions" (P25). Team members were "interest[ed] in the other teammates (based on getting to know them)" (P6). Teams were able to "foster an environment where team members excelled" (P13) and where "each team member knew they were important and contributed to the team" (P12). Another participant recalled, "We were a team. Every member was important, and we all wanted each other to succeed" (P23).

A respectful environment laid a foundation for deeper commitment, a characteristics that distinguishes HPTs, according to Katzenbach and Smith (2006). Eighteen participants (P1, P4, P6, P7, P10, P11, P16, P19, P21, P22, P25, P26, P27, P28, P29, P33, P35, P37) specifically identified camaraderie among team members as present and impactful. One participant recalled that

there was an amazing sense of camaraderie. When a crisis emerged in one area, [other organizational members] offered support and assistance immediately without being asked. They brought food, gathered [materials], compiled data...[formatted] shell products so [team members] could quickly update them without worrying about formats. We pulled together as a team, similar to how a family draws closer through challenges as a single unit. Outside of crisis, the team genuinely cared about each other's well-being; we held off-site picnics or potluck meals about once a quarter to foster team relationships. (P21)

Another participant expounded upon the presence of "camaraderie" (P22) by recalling that

as trivial as it sounds, one of the things I always remember when I think of my most successful teams is that we always took time to 'break bread.' We shared meals during the project (and after to celebrate!) [sic], and I really think this grounded us as a team. The other factor that comes to mind when I think of my successful teams is that leadership always recognized the team members with some sort of award or recognition. (P22)

Team efficacy also yielded positive effect, as one participant recalled, "We enjoyed coming to work, enjoyed each other's company" (P1)—a sentiment shared by another participant who stated, "I loved going to work every day" (P10) when describing a successful team experience. Participants worked on teams who interacted positively (P4), "very well" (P10, P25), and professionally (P4, P34), even "exceptionally professional" (P27). These positive interactions and professionalism were noted even

during "periods of high demand and high stress" (P4). Team members enjoyed "amicable relationships. Even during high stress events, the team's long-term interaction and sense of direction provided positive results" (P2).

Team members "possessed ethical morals and values" and were "conscientious of each other and what they brought to the table in an effort to achieve the common team goal" (P33). Team members "believed their colleagues were competent" (P38), but many attributed being a "successful" (P17) team to something deeper. Team members' attitudes were described as a "positive 'can do' attitude and a 'we're in this together' mindset" (P7). One team possessed a "'we can do it though the odds are stacked against us' spirit" (P15). Team members were "generally selfless" (P34) and "helpful to one another" (P34). They "addressed problems when they arose. Minor issues and disagreements were not allowed to fester into potentially larger and more damaging problems" (P30). Teams were able to overcome conflict and "friction" (P19, P24) and developed "genuine friendships" (P37).

The people: team leaders. Of the 36 participants (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P21, P22, P23, P24, P26, P27, P28, P29, P30, P31, P32, P33, P34, P35, P36, P37, P38) who noted the impacts of team leaders on effective teaming, 21 participants (P1, P8, P9, P12, P13, P14, P16, P17, P18, P19, P21, P23, P24, P26, P27, P30, P31, P32, P34, P37, P38) identified team leaders as important to their successful team experiences. A participant noted, "the most important attribute of a good team is a good team leader" (P31). The participant expounded upon this by saying, "I come from a background where 'somebody is always in charge.' This

does not mean a well-functioning team will always have a strong or autocratic leader" (P31).

Effective leaders showed team members they were valued, according to four participants (P1, P13, P23, P37). They also served as mentors who shared effective techniques and recognized team member efforts, according to P1. Team members also identified successful experiences working for leaders who maintained "an open door policy to hear about issues, findings, and suggestions" (P17), showed patience (P24), shared credit (P1), and acted as a "buffer so the team could work" (P8).

Leadership support that enabled "guidance and clear expectations" (P12) or "latitude from senior decision-makers that permitted consideration of unorthodox questions and solutions" (P32) were beneficial. The leader's ability to gain senior champions or "top cover" (P22), support from leadership outside the immediate team was also cited as an important factor of team success, according to five participants (P5, P12, P15, P16, P22) of the 16 participants (P5, P9, P10, P11, P12, P14, P15, P19, P21, P22, P24, P28, P30, P32, P34) who noted the role of senior leaders in fostering team experiences. Managerial "freedom" (P14) and the "freedom to make decisions on manning, scheduling, and resource allocation to work towards planned goals while meeting daily requirements" (P30) were also noted important leadership practices.

Leaders also made a difference in positive team efficacy. A participant shared that the leadership placed trust, even though it was a new team, in the members and underwrote errors or mistakes that were not deliberate or willful...the leadership

worked with the team to refine and in some cases modify objectives and provided motivation and encouragement to the team. (P27)

Similarly, a participant noted "strong leaders / managers providing feedback" (P38) was enjoyed by a team that exceeded its goals.

Another participant echoed the effect of leadership commitment on a team by noting that in "today's dynamic, multifaceted work environment, it is critical to cultivate and retain good leaders who value their personnel and are committed to their team members' personal and professional development" (P13). The participant further stated that such leaders "possess traits such as competence, decisiveness, compassion, and fairness...are visible, accessible, and approachable...[and] should also project accountability, confidence, and trust, as these are vital to inspiring mutual respect and teamwork" (P13). Effective leaders were also "present without being overbearing...open to ideas and suggestions...and displayed a remarkable lack of arrogance and hubris" (P27).

Participants experienced effective leadership under multiple dynamics, including military leaders from multiple branches of service (P8, P10, P27) and civilian leaders (P5, P8, P10, P23). The good leader has a "sense of responsibility" (P8) or "the ability to determine what is needed in each situation and [to] build the team and processes accordingly. The members have the maturity and experiences to operate within varying structures" (P31). Team leaders who were "experienced" (P21) or had "management buy-in" (P21) were also identified as important to a successful team.

Leaders who provided "guidance and support" (P9) contributed to team success, according to one participant, so that "even with constrained resources, the team can succeed if the mission is clear and the personnel are empowered to make effective decisions" (P9). Another participant experienced success when a leader "is personally committed, understands what's happening on the ground and conveys this to senior leadership, and is willing to provide top cover. The rest seems to fall into place" (P22). The need for advocacy and commitment from leaders was noted by another participant who stated that "successful teams don't always have visibility—despite their success—if the effort doesn't happen to be something senior management is particularly interested in" (P14).

In a nod to the role of shared leadership among HPTs, one participant identified the "quality of team leadership" (P8) as "the key factor in judging the effectiveness of each team" (P8) though the leader could also be a "deputy" (P8) instead of just the "top lead" (P8). In this example, the lead and the deputy worked interdependently to address external team issues and internal team issues respectively (P8). The leaders were also "participatory" (P8) in nature, "not only participat[ing] within the team, but ...also very focused on [ensuring the team] had what [it] needed...assistance...equipment...a physical resource or an emotional resource or an academic resource [or] an administrative resource, our team lead made sure we had it" (P8). The participant went on to note the distinction between a leader, who is "going in the same direction you are" (P8) and a boss, who is "telling you where to go" (P8). Such guidance often identified purpose and cultivated commitment, as further described in the next section.

Commitment: purpose and people. Of the 27 participants (P1, P2, P3, P4, P5, P6, P7, P8, P9, P11, P13, P14, P15, P16, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33) who provided comment on team member commitment, eight participants (P3, P4, P7, P8, P11, P14, P24, P32) cited specific experiences in which teams exhibited commitment to a common purpose or goals. Teams exhibited a "commitment to the work" (P11) or "desired end state" (P14). One participant highlighted the team's support of the organization's "vision, mission, and more importantly each other...They now had a greater sense of purpose and actively look for more opportunities to advance the team's line of operations" (P24).

One participant observed that commitment may compensate for other lacking HPT attributes, stating that a team that is "committed to each other has been the most successful even when the other characteristics [described in interview question 7, Appendix C] were not present all the time. Teams committed to each other...seemed to band together and even silently or being unaware have come up with a sense of purpose" (P4). Another participant ascribed it to being a member of DoD, stating,

Typically, DoD teams have a sense of purpose and are committed to one another. I tend to believe the majority of individuals who choose to work for DoD as civilians or military members possess a high dedication to executing the mission, which automatically provides a sense of purpose. Additionally, I believe most individuals who choose to work for DoD understand that to accomplish the mission objectives, whatever they may be, individuals benefit from being committed to one another. (P34)

Team members "helped each other as part of the bigger goal—something everyone knew they could not accomplish alone" (P15). Manpower and expertise also figured heavily in a team's ability to exceed its goals, according to 17 participants (P3, P5, P6, P9, P11, P22, P23, P24, P25, P26, P27, P30, P31, P32, P34, P37, P38). "Knowledgeable, motivated people" (P31) and "the ability to hire highly qualified, motivated team members with unique skills to support the team's unusual mission" (P32) contributed to successful outcomes.

Three participants (P3, P15, P24) specifically highlighted team member commitment to one another, a key component of what separates an HPT from an average team (Katzenbach & Smith, 2006). One participant noted, however, that "there's quite a subset to 'committed to each other'—respect, trust, communication admiration—in addition to the minimum expectations of performance...('Can he/she do the job?') [sic] and reliability ('Can we depend upon him/her to do the job?') [sic]" (P1). Committed teams exhibited "a sense of camaraderie" (P33), "trust (at all levels)" (P5), "mutual trust and respect...sharing successes and failures" (P38), or "treated each other with dignity and respect, valued each member's skills and expertise, and genuinely enjoyed working together" (P13).

Commitment yielded mutual accountability among some team members, according to three participants (P3, P29, P31). Team member "relationships led to more effective and efficient work since we felt accountable if we weren't pulling our own weight" (P29). Another participant noted that "we held high expectations of one another...[which] ensured we were stretching each other to perform at our best" (P31).

"Differences in experiences and personality were superseded by mutual respect among the individual members and a desire to achieve our mission" (P8). Commitment led to bonds, even if team members "weren't all great friends, we still genuinely cared for each other at a basic level" (P21). Another noted that one team "lacked commitment to one another since [the team] hadn't been working together that long" (P17), but the team still became an example of excellence due to the team's commitment to the mission and outcomes, according to the participant.

Deep commitment among team members was experienced in many ways. Teams "bonded" (P15) as they worked and "drew closer as a cohesive unit (family)" (P24).

"Teams may spend more time with each other, in many cases, than their own spouses or families" (P28). Team members experienced working in teams that "looked out for each other, especially on those long nights when we were tired and still had hours left in the mission" (P37). Team members brought "in snacks and flex[ed] meeting times to accommodate members" (P18). They "took turns purchasing caffeinated beverages for each other to keep morale up...[M]ultiple times...[organizational] leaders would show up with dinner for the team because they recognized we were working extremely long hours and they were invested in our success" (P22).

One participant recalled a particularly poignant example of team member commitment when the participant was facing a life-threatening illness. The team and its leadership provided "moral support...[and] allowed me flexibility so I could still work, so I could still be an asset, not a liability" (P8). The participant recalled one team

member "even offered to come and mow my lawn" (P8) during recuperation. Knowing that "somebody cared...got me through" (P8), according to the participant.

The participant clarified, however, that not all of the team's experiences were utopic, "They [the team members] weren't all perfect. We had our challenges, but they were... good people who for the most part cared about each other" (P8). The participant credited the team for its support, which made a strong impact in the participant's recovery. The participant concluded the discussion by noting, "someone once said it's very important...whatever environment you're in that someone knows you as just a human being, and the members of the teams that I worked with became friends. Many of them still are" (P8).

The context. As noted earlier, participants experienced environments exhibiting respect and affording an opportunity for all to provide comment or input, a dynamic identified among effective teams recently studied elsewhere (Poepsel & Schroeder, 2013). DoD team member participants also noted a difference between experiences in which team members were hand-selected and those that were not (P8, P10, P27); purposefully selected teams were perceived as exhibiting HPT characteristics in at least two examples (P8, P10), an observation similarly shared in the literature (Gardner, 2012a). DoD members also experienced humor in their teams despite the seriousness of their responsibilities.

DoD team members on teams that exceeded goals experienced trust, according to six participants (P8, P14, P24, P26, P37, P38); effective leadership, according to four participants (P5, P17, P34, P36); and enjoyed identifiable consumers of the team's

output, according to three participants (P5, P20, P28). The most effective environments were described as "friendly...where all members felt like they were an essential part of the team and could contribute to the mission" (P12) and "respectful" (P12, P30, P39), according to three participants. Similarly, participants identified desirable environments as those that were "considerate" (P18), "diverse" (P21), egalitarian with "no rank or ego" (P22), and "non-hostile" (P38), where mistakes were allowed if they were learned from and corrected (P38) and where the "free exchange of ideas" (P28) was encouraged.

Access to information, according to two participants (P5, P28); team cohesion (P7); a "positive [organizational] climate" (P2), respect "all the way down the line" (P8) also figured prominently among responses identifying effective work environments. Team members also benefitted from a sense they were an essential part of the team and could contribute to the mission, according to two participants (P12, P38).

Team members cultivated "open and transparent environments" (P5) that encouraged team members to be "fully transparent" (P15) in their interactions; "dissenting views...were expected and encouraged" (P5). Several other participants noted the importance of "open communication (good and bad news) [sic]" (P6). Opinions and ideas were derived from team members at all levels (P8) via "continuous coordination" (P14) and a "collegial and free-flowing" (P26) environment. Team members were expected to speak up "when they felt things were off track" (P18). Communications ranged from "good...face-to-face discussions" (P36) to "great, open communication" (P37). Team members "communicated extremely well with each other"

(P22), as exampled by one participant who noted that team members "conducted argumentation professionally, rather than personal attack" (P38).

Team members experienced "lively, animated, and candid" (P11) interactions.

Team members exhibited "integrity" (P6, P11, P22) and were "enthusiastic" (P16) and "motivated" (P16, P32), even "very motivated" (P33). An "openness and friendliness that made work not seem as much like work" (P29) also contributed to success and team members "gave praise when deserved" (P30) to one another.

Four participants (P5, P9, P15, P17) identified the possession of clearly delegated authorities as important to effective training. Other participants noted the need for "senior organizational support" (P14) or "the authorities to succeed" (P14), which gave the team confidence and an understanding of any limits on their potential approaches, was also deemed important to effective teaming. Authorities were further described both in terms of the team's authority to satisfy goals and the team leader's authority which "empowered [the team to] delve into the details of the project on the [leader's] behalf and with [the team lead's] authority behind it" (P17).

Empowerment was also observed in diverse environments, such as in a diverse military and civilian team. A participant worked on a team comprised of officer and enlisted military professionals and DoD civilians spanning multiple generations (P8). "The generations melded rather well" (P8), the participant recalled. "We were all headed in the same direction...I was treated by everybody with respect...more than I deserved" (P8). The participant surmised, "I think sometimes it was because they [other, younger team members] had been reared well by parents who taught them well" (P8). Upon

further reflection, the participant offered, "It may very well have been that the youngest members were military members and so had the respect of the officers simply by the fact that they had made a commitment to join the military to do something outside themselves" (P8). Officers, too, "were treated with respect and they were genuinely good people because to this day, the officers that I knew that are now out of uniform are still good and respectful people of others. They don't have prejudices or preconceived notions" (P8).

A team's ability to function autonomously was also highlighted as a positive experience by another participant who recalled a "highly successful team was given a task or assignment then basically left alone to tackle the issues and return...In the successful teams, we felt like a cohesive unit" (P21). Cohesion superseded individual primacy. "Pride of individual authorship [of an output] is subordinated to collaboration and the team's effort and concerns over 'who will get the credit' evaporate" (P32). Five other participants (P9, P13, P16, P24, P32) similarly identified collaboration as an important experience on successful teams.

Teams also achieved cohesion through humor, according to nine participants (P4, P7, P8, P10, P11, P22, P24, P28, P31). One participant's description of humor suggested it was built upon positive team dynamics: the "degree of teasing and disagreement occurred against a backdrop of trust, integrity, and commitment to the work" (P11). Another participant recalled "much humor in a workday despite the seriousness of responsibilities" (P8). A separate "team dynamic included a lot of laughter and goodnatured banter which kept everyone's spirits high through the most intense moments of

the project" (P22). Similarly, a participant offered that "one of the things I have found with these great teams I've been working with is that they take what we're doing seriously because it's a very serious mission, but they don't take themselves seriously" (P8).

Teams experienced a "lot of joking...if you had a thin skin you wouldn't have made it through" (P8). The participant attributed this "very healthy use of humor" as a stress release of sorts, "I think [humor] was used by some of the leaders to keep things from getting too serious because you can get pretty tense when people are killing people...or you're concerned about the safety of your countrymen" (P8). Similarly, another participant observed that "the very best teams have a higher level of success when they are well-educated, intelligent, and focused on mission, but also fun and appreciate humor!" (P28). The participant went on to note that much DoD work "can be dark, deadly, and depressing. However, gallows humor and a healthy ability to interpret sarcasm is an invisible force that brings a team together. It is the invisible cement that holds the members together" (P28).

One participant also experienced team cohesion leading to goal satisfaction by interacting with team members outside work. The participant opined,

I think after-work, team activity plays a tremendous role in [the team] achieving its goal. Family barbeques, beach, dinner, hiking, camping, or just hanging out changes the chemistry within the team. It can't be every weekend, but at least once in awhile especially when the team works so hard. Some teammates argue, 'Yeah, I see you all week at work, why would I see you again during the

weekend?' Well, my answer is, everyone acts differently after work. No pressure...no rank. No work given to you. Just [being] genuine [with] each other. It's a great feeling hanging out with teammates without pressure...on their shoulders. (P19)

Another participant, P4, similarly found that socialization contributed to team success.

The participant recalled that when

I was on a successful team, the majority of the team members were engaged and committed to the mission...dedicated to self-improvement, and demonstrated a willingness to learn and improve. The majority of the team also was flexible and demonstrated consistently a willingness to cover for each other and help each other...Some members of the team were friendly outside work, and this care for each other seemed to translate to the team and set a positive tone.

Among these shared experiences leading to strong team cohesion, three participants (P1, P28, P38) identified the need for leaders to create an environment whereby the team could fail and learn from failure, such as an "atmosphere of intellectual curiosity without fear of failure...retribution...[or] career suicide" (P28). One participant cultivated an environment for others to grow and develop in anticipation of the participant's own eventual departure and stated, "If I haven't trained, if I haven't become irrelevant at my job, I think I haven't done my job particularly well...I have to give them [successor team members] some certain level of trust, see how they perform" (P27). The participant benefitted from leaders who used time in the office, away from the battlefield, to practice by doing. "Fundamentally, nobody was getting shot at. The only thing that

was dying were electrons" (P27). The participant described the experience in terms of development, "I think [my leader] was trying to mentor me along...give me ideas and suggestions, let me stumble through it to develop me personally as well as the rest of the team" (P27).

The participant, P27, further recalled a time when the participant directed a junior team member to brief the Headquarters Commanding General in a non-deployed, office environment. When questioned by a senior leader about the appropriateness of such a decision, the participant responded,

Sir, I think it's exactly appropriate...nobody's going to die... when he [the junior team member] is in a place where somebody is going to die, there are going to be other stressors...and he doesn't need to be worried about whether the guy's got stars on his collar if he knows what he's saying is right.

The participant described a commitment to training team members at all levels. "Give me the lowest ranking guy briefing. Give me the guy who's never done it before...[if] he's not cutting it...retrain [him]...I've got to have him be able to perform otherwise it's just dead weight" (P27). The participant's commitment to cultivating a learning environment was partially driven by the participant's perception, "I have to let them make mistakes...you learn more from failing than you do from success" (P27). This mindset was learned from the participant's former boss who often said, "Nobody gets up in the morning and says, 'I can't wait to fail today."" (P27).

Still another participant viewed a safe place for learning from failure as one that is balanced with the ability to "ruthlessly oust careerists" (P38). Instead, those with an

"ability to accept responsibility for failure, rather than deflecting responsibility" (P38) were preferred. When recalling a particularly stressful team experience that ended successfully, the participant noted that "everyone understood mistakes would occur; however, each team member endeavored not to make the same mistake twice...mistakes arising from limited information, then corrected upon receipt of more accurate [information] was a fairly standard condition" (P38).

The team environment benefitted from being a place where team members could "interact freely and willingly with each other" (P30) and a safe place, which Edmondson (2012) also identified as a contributor to successful teaming. One participant noted,

There must be someone within the group...that encourages everyone to feel safe and encourages input from some of the quieter members. It takes several meetings before all members feel secure in their knowledge of the subject and therefore feel free to offer ideas. There needs to be introductions of what everyone brings to the table. This is often overlooked. Once [the team] had a better understanding of what each person brought to the table (experience, knowledge) [sic], things moved along quickly. (P18)

Teams similarly benefitted from an environment in which they were allowed to plan.

As I present in the section addressing RQ4, the role of developing, assessing, and updating a strategy based on guidance or reviews (or failure to do so) emerged as a theme among 29 participant responses (P1, P2, P4, P5, P6, P7, P8, P9, P10, P11, P12, P14, P16, P18, P20, P22, P23, P24, P26, P27, P30, P31, P32, P33, P34, P35, P36, P37, P38). Of these, one participant, P37, recalled a specific experience in which pre-planning or early

strategizing contributed to a shared understanding of goal satiation and fostered team cohesion. Specifically,

before the start of every shift, our team would get a briefing on what we were going to work on for the next 12 hours. We had a different goal every day...Our team would always put themselves in the scenario as if they were on the ground. This gave us a sense of pride and purpose. (P37)

Experiencing effective teaming in a virtual dynamic was experienced differently than that of a face-to-face environment. One participant found effective team building on a virtual team was accomplished through "performance" (P11), which also served to build trust. The team was separated geographically by "5,000 miles" (P11) and used technical means to collaborate (P11). "I didn't even know what the project manager looked like until I went back [to Headquarters], and it was kind of strange" (P11), the participant offered.

Participants experienced successful teaming across many resource dynamics. Twelve participants (P3, P6, P9, P10, P11, P21, P22, P23, P24, P30, P32, P37) noted that, where possible, funding to ensure the project and related supply needs were met was important. Other tangible resources available to some teams included physical space or facilities, according to five participants (P5, P6, P11, P23, P31); administrative support, identified by two participants (P18, P22), to help the teams focus on their work, "record what is happening and get it back to the team members for mutual agreement [on a goal] or changes" (P18), "freed the team up to focus on the mission" (P21) or encouraged "work schedule flexibility to provide better coverage" (P8). A training team participant

deemed a receptive "audience" (P31) a resource; the participant also noted that "since we were dealing in a 'knowledge environment,' our principal resources were ideas, not things" (P31).

The ability to train team members in weak areas was also considered a resource by seven participants (P2, P6, P8, P9, P23, P26, P35). Twenty-one participants (P2, P5, P6, P7, P8, P11, P12, P14, P16, P18, P20, P22, P24, P27, P29, P30, P31, P32, P33, P38, P39) identified time as a resource. One participant noted the need for "time and space to think outside the churn of the command's day-to-day priorities" (P32). The time to focus solely on the job ("not dual-hatted" (P6)) or being "fenced off" from institutional administrative requirements or competing...requirements" (P16) was also vital. One participant additionally noted the team was "provided with an isolated workspace to keep team members 'fenced' from normal duties" (P26). Taking the time for pre-project planning also contributed to one team's success because it allowed the team to determine requisite back-up supplies in case of equipment failure (P22).

Funding could also foster collaboration via "travel resources that permitted exposure to new ideas/thinking and face-to-face liaison with partners and collaborators" (P32). Collaboration, communication, and coordination were similarly affected positively through information technology (IT) equipment and support, according to 15 participants (P5, P6, P8, P9, P11, P12, P13, P19, P21, P22, P23, P25, P26, P31, P37). Another participant emphasized the importance of face-to-face meetings, noting that "much can be done in a short time vs. dragging on VTC [videoteleconference] meetings...just to save money" (P18).

Although some participants attributed their teams' successful experiences to sufficient resources, perceptions about the role of resources varied among participants. Some noted no additional resources (P2) or differences in resources when teams experienced "success or lack of success" (P4) or that the team was "not given additional resources when it exceeded its goals" (P24). Another participant noted resource allocation was based on the "perception of the importance of the mission, rather than the effectiveness of our work" (P1). The participant also noted, "I don't remember a time when sustained superior performance correlated to greater resources. Recognition, yes. Greater (and often wider) [sic] work, certainly" (P1). One participant identified resources as "more than sufficient" (P13). Another participant noted a "plethora" (P33) of resources were "abundantly available" (P33). Still another offered the observation that "a successful team can work and succeed without much for resources" (P18).

Summary RQ2. Perhaps the best summation of how team members experience HPTs was offered by a participant who noted, "Every triumph I have been a member of was a team-based success story" (P20). Based on participant responses, DoD team members enjoy HPT experiences that optimize their skills and expertise, prioritize commitment to the mission, and, unexpectedly, afford a healthy allowance for humor (P4, P7, P8, P10, P11, P22, P24, P28, P31) and tolerance for learning from failure (P20, P27, P28, P37, P38). Several participants (P8, P10, P27, P37) noted a deeper level of commitment to one another could be fostered through team cohesion cultivated during long hours and important work. The teams' ability to focus on the mission and achieve effective outcomes despite inconsistent resource environments offered another example

of team member commitment. In the next section, I examine how these team members measured team performance and outcome.

RQ3: Measuring Team Excellence

Measuring public sector performance is difficult (Gabris & Nelson, 2013); the data collected for this study confirmed this assertion. One participant response reflected a perception that team member contributions contributed to their organization's overall success (P1). Eleven study participants (P5, P6, P11, P13, P24, P29, P30, P31, P33, P34, P35) were able to identify team experiences in which goals were satisfied, including one that "exceeded goals for [the participant's branch of service] metrics" (P39). Few responses provided specific performance measurement metrics; this may be due to the frequently restricted nature of DoD work or my request to not provide specific details (to ensure confidentiality was maintained). As further described below, participant responses suggested greater performance measure metrics might facilitate more precise assessment of effective performance.

In Figure 6, I present the frequency of participant responses that aligned with codes comprising the Team Effectiveness coding category. I observed Team Effectiveness category codes among participant responses to IQs 1, 2, 3, 3a, 4, 5, 7, and 8, which were crafted to address RQs 1, 2, and 3.

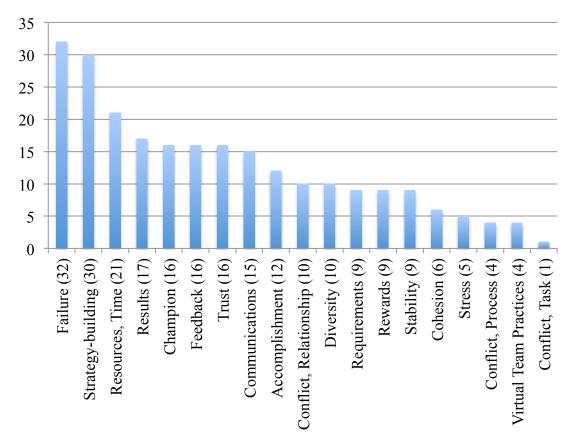


Figure 6. Observed Team Effectiveness codes and frequency among participant responses (Appendix E, Table E4).

Perceptions of contribution to organizational goals ranged from simply meeting the goal, according to 11 participants (P5, P6, P11, P13, P24, P29, P30, P31, P33, P34, P35); "consistently fac[ing] challenges and finding ways to overcome them...to consistently meet and exceed our goals" (P13); "satisfying the mission...faster and better than other teams" (P1); developing new models for emulation by others, according to two participants (P15, P27); and affecting "changes at [training] and doctrine [levels and] influenc[ing] national level efforts to reflect needs of tactical [professionals]" (P3).

Teams also "delivered on organizational goals to serve warfighter needs, provided senior

leadership [and] decision makers timely and relevant [information]" (P16). One participant noted that the team "actually defin[ed] the mission, vision, and strategic plan which positively affected the [participant's office]" (P20). Another participant's team stopped a potentially detrimental and costly process before it began, which "increased team credibility [and] reduced legal challenges to the final process" (P17); the final estimates of reduced time and money were incalculable.

Ten participants (P4, P10, P16, P21, P24, P26, P29, P34, P36, P38) also identified providing decision-maker support or, according to another participant (P25), improving overall performance, as key measures of team performance and contribution. Supporting key senior leader decisions included providing necessary information, according to eight participants (P4, P10, P16, P21, P24, P26, P29, P34). This practice allowed decision-makers, including "policymakers and warfighters" (P24), additional "decision space" (P24), that is, precious additional time to consider possible courses of action and their consequences.

Successful support to decision-makers was due to "being proactive rather than reactive, which resulted in not just meeting the organization's goals, but exceeding them" (P4). In another example, the team was able to "move much more quickly than anticipated…kept information flowing…and removed a multitude of potential headaches from the path of leadership with more urgent issues requiring [the leaders'] attention" (P14). One participant attributed it to team member standards and noted the participant's "team consists of well-informed, well-trained professionals who do not like to lose under any circumstances. The team's [output] has driven decision-making not only at the

theater, but at the national level as well" (P38). The participant continued that the team's "greatest contributions come from my team's ethos: Never stop. Ask questions, then question your questions. Collaborate. Mercilessly crush careerism and willful nonperformers" (P38).

A participant attributed experiences on "many successful teams" (P6) to common traits [such as] knowing the vision and working toward a common mission. Knowing the organization's goals is key to a successful team contributing to these goals. The...team knew what it was trying to do and was motivated to meet [and] exceed goals. Many teams just jump into tasks and don't define the purpose, mission, [or] goals, so it's difficult to align toward common goals when they're not defined.

Another participant noted their team's efforts to meet organizational goals had a corollary effect of improved team efficacy, "All members contributed and felt appreciated. We valued teamwork and helping each other out" (P23). Team performance was also improved by the "establish[ment of] a cadre of personnel with a shared understanding of team internal processes and standards, and familiarity with the requirements and stakeholders in the larger organization" (P27). Beyond the ability to satisfy an organizational goal, the longevity of the impact was perceived to contribute to team efficacy by one participant, P19. When describing a team's contributions leading to an organization-wide reduction in workload, the participant noted there was "something satisfying knowing this procedure will be implemented throughout the command, and it will stay long after we [the team] leave" (P19).

Some teams measured contributions to their organizations' performance by addressing internal deficiencies, which led to team recognition with "several awards" (P23). Four other participants (P8, P12, P17, P18) experienced improved efficiencies overall which, in one case, reduced work by approximately 50%, allowing the participant to "request additional duties" (P8). Another participant's improved efficiencies "allowed the organization to focus resources elsewhere" (P12). Another participant noted that reaching goals yielded saved funding which "allowed us to adjust dollars for additional training for our personnel...[and] gave us a chance to look and plan longer range vice living month-to-month" (P36). One team contributed to organizational goals by developing "tools to streamline the process to make information more readily available" (P7).

Other team members measured their teams' contributions by their ability to improve expertise beyond their immediate organization (P1) and, separately, to support "national policy...expanded engagement with other organizations, and...elevated the organization's performance standards" (P9). Still another team "supported multiple operational commands and led DoD...requirements" (P2). While one team had "direct impact to the overall mission of the organization [and] impacted several organizations' ability to complete and continue their mission[s]" (P22), others "shaped national policy, expanded engagement with other organizations and nations, increased organization's standing and influence, and elevated the organization's performance standards" (P1), or contributed to "national- and theater-level policies and strategies in furtherance of national interests" (P24).

Some contributions found their way to "the President and Secretary of Defense" (P32) while others improved collaboration among internal or external partners, according to three participants (P20, P24, P25). One team created best practices for processes "disseminated to DoD leads and significantly shaped the overall DoD effort" (P26), enabling "anticipatory [support] that enabled [senior leadership] development of plans to mitigate [potential negative] impacts" (P26). Still another "proved a new organizational model could be highly successful...[with continued] attempt[s] to replicate the model on a far larger scale" (P15).

Summary: RQ3. Responses to RQ3 underscored challenges to an organization's ability to define and measure effective output, a finding also noted in the literature (Gabris & Nelson, 2013). Confidence in public sector value and service are consistently low, even when performance measurement metrics are clearly identified (Fryer, Antony, & Ogden, 2009). Effectively measuring team performance in a DoD office-based context presupposes all members clearly understand the goal(s) while enjoying feedback on the effectiveness of non-quantitative output described by eight participants as "decision-maker support" (P4, P10, P16, P21, P24, P26, P29, P34). The ability and permissibility to identify and share specific performance goal satiation with the public may improve assurance that the public sector can meet citizen needs and expectations ("New low in approval," 2014; Steinhauser, 2014); this will not be possible in all circumstances. As noted among the responses to RQ4, DoD teams may be able to share such performance measurement metrics within their organizations or among other DoD organizations sharing similar missions to encourage benchmarking and improvement over time.

RQ4: Expanding Team Excellence

In RQ4, I sought to examine to what degree high-performing public sector DoD team members perceive they influence others within their organizations to adopt high-performing characteristics or practices. Case studies may identify traits and offer examples for others to emulate (Bush, Abbot, Glover, Goodall, & Smith, 2012), but transferring one's experiences to others often is difficult (Yin, 2014). It is difficult to transfer the characteristics and best practices of effective HPTs (Edmondson, 2011b; Johnson & Johnson, 2013). Similarly, the tendency for multiple teams to adapt best practices among themselves depends upon a number of contextual considerations, such as local conditions and the degree of complexity associated with the practice (Ansari, Fiss, & Zajac, 2010). Participant responses, as presented below, supported this assertion and suggested an area where knowledge sharing improvement may be possible.

Ray and Bronstein (1995) wrote that organizations failed to replicate successful teams' experiences because the organization did not establish the support systems necessary to either reinforce or transfer the group's experiences to others. Warrick (2014) separately noted that organizations might need to invest in training to develop effective HPTs comprised of current employees. Study participants suggested similar challenges to effective influencing of others within their organizations to adopt HPT characteristics. Participant response themes ranged from informal mentoring to formal programs or, conversely, the absence of a sharing approach altogether.

In Figure 7, I present the frequency of participant responses that aligned with codes comprising the Team Transference coding category. I observed Team

Transference category codes among participant responses to IQ6, which was crafted to address RQ4.

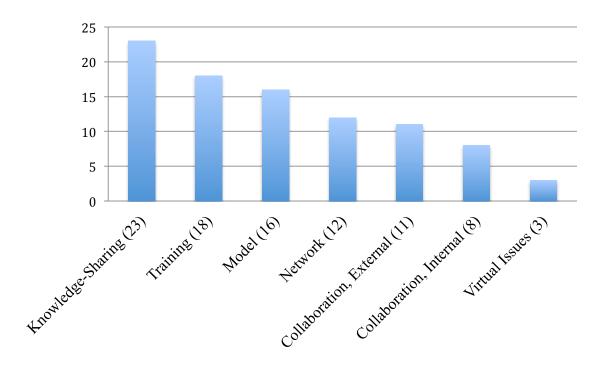


Figure 7. Observed Team Transference codes and frequency among participant responses (Appendix E, Table E5).

Sharing effective HPT characteristics and practices is challenged by the uniqueness of the experience (Katzenbach & Smith, 2006). One participant (P1) expressed doubt about a team's ability to influence others to adopt characteristics of HPTs and stated, "I don't know that we did" (P1). Other participants noted a lack of "direct evidence this team inspired or helped any other team" (P31) or a belief that "I like to think people learned from [our] example, but have no proof of that" (P14). Another participant noted a lack of formal attempts to help others adopt successful practices (P4). Still another participant, P7, suggested a lack of team member self-awareness of the team's legitimate, successful status and own best practices. The participant offered, "I

actually didn't think we were a successful team until now. We were just a group of likeminded individuals who were dedicated to doing a good job" (P7).

At times, a team member may be unaware others outside the team even took notice of the team's success, according to one participant who stated that

I don't recall a formal process where we helped other teams adopt successful practices, but I remember others commenting on how obvious it was that we were a team who really worked well together; in one instance the person who made the comment said he wished his team was more like ours, which surprised me because he was in an entirely different [office] so I was taken aback that he even picked up on it. I suppose we led by example more than anything. (P21)

Another participant "believed our team was somewhat infectious. We seemed to be the only...team that had high morale...we all worked well together. I believe we rubbed off on [others]...I saw reflection of our success start to emerge in other areas." (P23).

As in responses addressing earlier RQs, the role of the team leader emerged as a theme among responses to RQ4. A participant, P29, noted that the lack of sharing with other teams was not due to purposeful withholding by the team members, but ascribed it to the team's leader. "Unfortunately, our leadership didn't enable our successful teams' methods to be adopted by others....Our 'successful team' was the outlier and were treated as pariahs. Rather than rewarding a successful team...we were actually given more work and treated worse" (P29). Another participant challenged the notion of influencing others and observed that

I do not know how one team's successful practices can help another other than being able to bring the experience of a successful team to the table. But if the leader is NOT [sic] from a previous successful team, then all bets are off. It's almost serendipity when a great team comes together. (P18)

At least one leader played a positive role, however, in "emphasiz[ing] with our team the need for open communication" (P36), which was noted as a practice in lieu of "codify[ing] the process" (P36). Similarly, "the management above encouraged other teams to adopt [some best practices]" (P4) in a practice perceived effective to encourage shared knowledge.

Teams transferred knowledge internally with new members through indoctrination (P10) or integrating members of other teams into work processes (P16). One participant assumed new members were influenced through their placement in "a well-functioning and welcoming team environment" (P30). Including others in a "peer review" (P28) and "teaching other teams how they expanded their network" (P28) were forms of collaboration (P24) that were perceived to positively influence others within the organization to adopt HPT characteristics in addition to "being the positive role model" (P33) and practicing "publicly shared credit" (P24).

Developing and adopting a "team strategic plan" (P20) helped to communicate the team's goals and was perceived to offer collaboration opportunities as others became aware of the plan. Mentoring (P9, P10, P16, P27) and coaching (P11) were also perceived to support successful team knowledge transference. As one participant recalled, "everyone got along, were respectful, and everyone wanted to learn about what

the other one was doing, and everyone was willing to teach and share" (P39). The use of mentoring has separately been found to improve team interactions (Joy & Haynes, 2011).

Some participants ascribed successful knowledge transfer to sending one of their team members to another team for a period of time. For example, one participant "embedded assistance within [other teams]" (P10) to facilitate effective inter-team collaboration. Other team members were "called upon (informally...) to help other groups" (P14). Shorter-term visitors participating on a project team "took many of our best practices back to their home teams upon completion of the project" (P22) including providing "an after action report [and] lessons learned to various teams throughout the organization" (P22).

Other participants identified routine, regular transfers of personnel as a potential contributor to sharing knowledge about HPT best practices. One participant recalled a team experience in which "nearly every member of the successful team went on to serve on follow-on [teams] and brought concepts and ideas to the table from their experience" (P27). The team went on to "[establish] a baseline for the rest of the larger organization of what it could expect from the [team] and how to leverage the team's knowledge and data" (P27). Another participant offered that members who left the organization "knew what it was like to work in an effective workspace and they would work to create similar environments in their units" (P30).

Another team did not "[help] other separate teams get better. Rather, the rotation of members on [and] off the team probably helped other unknown teams because the team members shared traits and experiences of the high-performing teams" (P6). The

participant also "implemented lessons from the…team with subsequent teams because [the participant] had experience with this successful team" (P6). Still another participant "suspect[ed] the individual members have been able to leverage lessons they learned as they've participated in other teams in the years since" (P31). The participant admitted, however, that this assertion was "only an assumption" (P31).

Ten participants (P4, P5, P12, P17, P22, P24, P25, P26, P34, P38) described more formalized sharing, including the active sharing of best practices though one participant was "not sure those lessons were learned outside the [office] within which [the team] existed" (P34). In another example, "the team drafted lessons learned and best practices after a crisis and passed to other teams within the organization" (P12). Still another participant noted that

it was simply a matter of sharing best practices and emulating processes that worked. We did not reinforce failure, and when we did make mistakes, we examined how to prevent making the same mistake in the future. Lessons on how to effectively collaborate...had the most impact. Additionally, the value of time and managing...requirements were also critical to low-performing teams becoming more effective. Professional peer pressure to win—without it, other teams will have no understanding of why they should care to go above-and-beyond. (P38)

Another participant described successful teams as the foundation of "learning organizations [that] became teaching organizations, especially as the teams developed best practices (and then next practices) [sic] that other teams could initially imitate, and

then emulate" (P5). These best practices were then shared throughout the organization as team members were rotated onto other teams (P5). This dynamic was shared by another participant whose successful team members went on to become "the nuclea[s] of the [subsequent] team that did [a] wider and far more ambitious...effort" (P25).

The use of *after action reviews* has been found effective in team knowledge sharing (Edmondson, 2012), including among SWAT teams (Bechky & Okhuysen, 2011). *After action reviews* were also found to contribute to reflective team learning which improved the team's ability to adapt to emergent events (Oertel & Antoni, 2014). Participant responses highlighted examples supporting these earlier findings. Teams were perceived to positively influence others to adopt characteristics of HPTs through the use of "after action reports, including lessons learned" (P22) and the documentation of "best practices at every opportunity" (P24), which the team then "codified...into standard operating procedures that were consistently refined and shared with all concerned" (P24). Some best practices were adopted outside the team and its office, resonating among other teams at the "DoD-level" (P26), following effective development of "best practices...standard operating procedures, [and] knowledge management" (P26) to enable effective sharing with others.

Some teams were able to serve as a "model" (P3, P15, P33, P35) of excellence both within and outside to their organization (P3); others saw "a significant portion of the processes and standards…adopted as a template for follow-on exercises and real-world events" (P27). One team became a "poster child" (P11) for related initiatives at the national level. A team "set the benchmark for others to emulate" (P13) because, as the

participant noted, "When other teams witnessed how this team functioned and interacted together, it in turn motivated other teams to strive for the same performance. Others wanted to experience a similar level of success in achieving and exceeding goals" (P13). One team's model offers an example of the potential for longevity and has remained in place "through five interim leadership changes" (P15). Three participants (P8, P9, P19) noted that some teams were even able to craft formal training or an "instruction module [the team] hopes will help other teams in the future" (P32).

Sharing was not always necessary, however, if "other teams 'knew what they were doing and didn't require any help'" (P39). Sharing was also not always easy. A participant noted that

we were not secretive about our process and actively sought to share practices that proved effective. I don't know how much of what we did was accepted and implemented by others...[I] heard...that other teams attributed our success to other things: that we were lucky, or favored, had more resources. Whatever made [the team] so successful could not be replicated, it seemed. Maybe this is human nature—we look for simply external explanation rather than those that necessitate hard introspection. (P1)

Teams lacked a continuous sharing forum that encouraged purposeful discussion of a team's best practices, according to one participant, P10. Certain key events like military exercises, however, did commonly incorporate *after action reviews*, according to another participant, P27.

Summary: RQ4. Although examples of knowledge sharing of best practices were offered among participant responses, participants reported inconsistent and sometimes non-existent experiences influencing others within their organization to adopt characteristics of HPTs. Participant assertions that personnel rotations can encourage transference of characteristics of HPTs to other teams contrast the literature, which indicates such approaches are not consistently successful (Edmondson, 2011b; Edmondson, 2012; Johnson & Johnson, 2013). The successful sharing of knowledge owing to personnel rotations, as described by participants, may be unique to the military culture in which members are transferred routinely to new postings. In the final chapter of this study, I identify potential practitioner opportunities to inculcate best knowledge sharing practices derived from participant responses addressing RQ4.

Summary

In this chapter, I documented participant responses addressing the four RQs I developed for this study. In response to RQ1, DoD team member study participants confirmed they do experience characteristics of HPTs though the experiences vary significantly. The descriptions of these experiences (addressing RQ2) aligned with the literature describing HPTs as small, highly focused teams which share a purpose and performance measurement standards, hold one another mutually accountable, consistently exceed organizational expectations, and are deeply committed to the organization and to one another (Ingvaldsen, Johansen, & Aarlott, 2014; Katzenbach & Smith, 2006). Participants provided responses that addressed RQ3 and indicated they generally perceived that their efforts contributed to their organization's performance. Specific

metrics, however, were lacking in most responses. Participants were also able to describe experiences transferring knowledge about best practices, but the responses suggested the degree to which team members perceived they influenced others within their organizations to adopt characteristics of HPTs (RQ4) was limited. In Chapter 5, I discuss the findings of this study, offer potential topics for future studies, and describe how this study may contribute to positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

DoD team members are facing significant personnel and fiscal constraints (Hagel, 2013), warranting examination of operational practices that can improve efficiency. Tannenbaum, Mathieu, Salas, and Cohen (2012) encouraged further research to examine how organizational leaders have cultivated self-directed teaming practices, similar to the autonomy enjoyed by HPTs, during times of economic challenge. Part of the goal of this study was to examine DoD office-based team experiences to determine whether HPTs may offer DoD teams a solution to resource constraints. HPTs have been shown to exceed organizational goals and yield cost savings and efficiencies at a higher rate than non-HPTs (de Waal, 2010). When determining which methodology was most appropriate for this study, I considered recent research, which found that the use of case studies can lead to identification of examples of best practices, enabling comparison across experiences (Leach & Mayo, 2013; McAlearney, Garman, Song, McHugh, Robbins, & Harrison, 2011). Other authors encouraged the examination of team experiences and processes to comprehend more fully how to cultivate effective HPTs (Bonebright, 2012; Humphrey & Aime, 2012). Such encouragements seemed a validation of the selected topic and methodology to support answering the research questions of this study.

The purpose of this qualitative, descriptive case study was to determine whether DoD team members experienced teaming characteristics associated with HPTs, to examine how these experiences presented themselves in practice, to discern whether team

members ascribed organizational goal satisfaction to these experiences, and to examine whether the team shared these experiences with other teams to encourage broader organizational HPT practices. A relative lack of in-depth studies examining military member experiences (Castaño, Watts, & Tekleab, 2013: Kirke, 2010) and, separately, a call for the use of semistructured interviews to examine military teams' dynamics, performance, and impact on their surroundings (Yammarino, Mumford, Connelly, & Dionne, 2010) contributed to the assessment that an opportunity existed for deeper study of military team member experiences. Such a study may contribute to the literature, offer DoD members an opportunity to share their perspectives, and provide examples of best DoD team practices from which practitioners can draw during their own HPT pursuits.

Interpretation of the Findings

Figure 8 highlights the top 20 themes observed from coding the findings of this study. These findings form the basis of the discussion that follows. Less predominant findings, such as humor, are also addressed to acknowledge divergence from the literature or unexpected results.

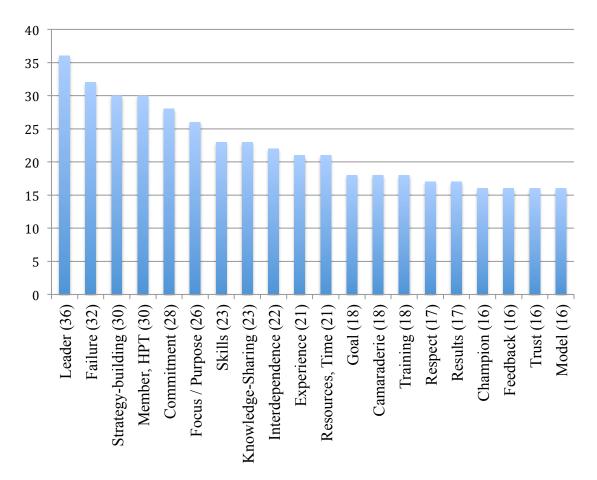


Figure 8. Top 20 themes observed by frequency among participant responses (Appendix E).

RQ1: Identifying Team Excellence

When presented with a definition of common components of HPTs, DoD team members working in office-based environments who participated in this study confirmed to varying degrees that they had experienced some or all of such characteristics, such as complementary skills among team members (P1, P3, P4, P8, P10, P12, P20, P21, P25, P34), a shared focus (P1, P3, P4, P5, P6, P8, P10, P11, P12, P14, P16, P18, P21, P22, P24, P26, P27, P28, P31, P32, P33, P34, P36, P37, P38, P39), agreed-upon goals (P3, P4, P5, P6, P11, P13, P15, P16, P18, P19, P25, P26, P27, P29, P30, P33, P37, P39), mutual

accountability (P1, P2, P4, P11, P13, P22, P29, P32), and team member commitment to the mission and those who affect it (P1, P2, P3, P4, P5, P6, P7, P8, P9, P11, P13, P14, P15, P16, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33, P34, P35). The frequency and depth of these experiences, however, were inconsistent across the 39 participants of this study.

The definition of HPTs was purposely delayed until IQ7 to determine the frequency with which participants would self-identify the characteristics of HPTs in earlier IQ responses. The collective 39 responses to IQs 1-6 suggested that a limited number of DoD team members in this study (P1, P8, P10) had a pre-formulated definition of HPTs. Thirty participants (P1, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P16, P20, P21, P22, P23, P24, P25, P26, P27, P28, P30, P31, P32, P33, P37, P38, P39) responded positively to IQ7, which identified specific characteristics of HPTs; participants generally neither voluntarily nor specifically identified these characteristics in their responses to IQs 1-6. This divergence between participant responses before and after being introduced to some of the characteristics of HPTs listed in IQ7 suggested a knowledge deficiency and also an opportunity to educate DoD team members about key components of HPTs. Such education could enable recognition and cultivation of these characteristics as the members move throughout their DoD careers. This training would come with caveat, however, as the potential for all team experiences to achieve HPT status is extremely unlikely (Katzenbach & Smith, 2006). Ray and Bronstein (1995) wrote that not all teams are Type V, or high-performing, nor should they be if their purpose is short-lived.

Several obstacles to cultivating HPT experiences were noted among participant responses. Participants perceived several contributing factors, such as weaknesses of leaders (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P16, P18, P21, P22, P23, P27, P29, P31, P33, P34, P35, P37, P38), team member expertise deficiencies (P2, P4, P6, P7, P8, P9, P14, P16, P19, P22, P23, P24, P28, P31, P32, P35, P37, P38, P39), or personality challenges (P8, P10, P12, P18, P38, P39). Thirteen participants (P2, P6, P7, P8, P9, P22, P23, P24, P31, P32, P35, P37, P38) also identified team deficiencies due to conflict, which has been shown to emerge due to team members' perceptions of other members' abilities or levels of effort (Gupta, 2012). Study participant observations partially aligned with LePine, Buckman, Crawford, & Methot (2011)'s findings that team member personalities may affect small group dynamics. The authors encouraged consideration and identification of these personalities to improve interpersonal interactions. A participant suggested, however, that employing "diagnostic testing" (P1), whether for skills or personality, may not be feasible. Training may remedy deficiencies among team member skills and leader behaviors (Center for Army Lessons Learned, 2015). Participants identifying conflict as a source of team challenge (P1, P4, P8, P10, P11, P12, P19, P24, P28, P30, P38, P39) may also find remedy in focusing on the task instead of the team member, which has been found effective for overcoming conflict (Klein, Knight, Ziegert, Lim, & Saltz, 2011).

Virtual teams established trust through performance (P11); technology was important to foster collaboration (P5, P6, P8, P9, P11, P12, P13, P19, P21, P22, P23, P25, P26, P31, P37) even though virtual environments may render the cultivation of trust

difficult (P11). This finding partially aligns with a recent study, which attributed a virtual team's success to persistent interactions among the team's members (Quisenberry & Burrell, 2012). The authors also noted a need for the effective use of technology, purposeful efforts to build team member trust, and the role of leadership. Establishing trust through virtual team member performance (P11) also fosters accountability, which a recent study similarly found contributes to trust among team members, the presence of which relates significantly to team cohesion (Tseng & Yeh, 2013).

RQ2: Experiencing Team Excellence

DoD teams were diverse (P3, P5, P8, P10, P13, P21, P22, P25, P27), with unique skill sets represented among the members who could work collectively to achieve goals. This notion that the best teams are a blend of structure and individualized contextualization aligns with Braun, Avital, and Martz's (2012) study in which the authors found that team performance improved when leaders implemented three action-oriented practices: effective task management, cultivating a team identity, and encouraging individual autonomy for learning and output (pp. 185-187). Team member selection, whether purposeful (P8, P10, P37, P39) or by chance (P6, P17, P27), played a strong role in HPT experiences among those DoD team members (P8, P10) offering examples aligned with Katzenbach and Smith's (2006) definition of HPTs. Team composition reliant upon necessary expertise may contribute to successful group interactions (Aime, Humphrey, Derue, & Paul, 2014), a finding shared among study responses particularly when the expertise is reflective of subject matter expertise (P38), an awareness of the team's situational context (P6, P8, P10, P11, P19, P22, P27, P29), the

sufficient access to information technology that enables team member communication (P5, P6, P8, P9, P11, P12, P13, P19, P21, P22, P23, P25, P26, P31, P37), and the team member's professional and social network (P5, P7, P8, P10, P15, P18, P22, P26, P27, P28, P32, P38). A team member's network has been found to enable connecting the team to expertise it does not otherwise possess (Cross, Erlich, Dawson, & Helferich, 2008; Garrett, Caldwell, Harris, & Gonzalez, 2009; Pan & Wang, 2010).

Complementary skill sets were not always achievable, however, due to the transience of many DoD team members who move between postings on a routine basis (P8). Study participants who offered comment on team member stability (P2, P8, P10, P27, P36) found the need for a balance between stable membership enabling longevity, "thorough [account] knowledge" (P2), and new membership to foster effective team performance grounded in corporate knowledge about a team's processes, practices, and performance, an observation shared by recent research (Buljac, Van Woerkom, & Van Wijngaarden, 2013; Noe, Dachner, Sacton, & Keeton, 2011). Conversely, new team members brought fresh perspectives and an opportunity to innovate, an observation also noted in recent research (van Knippenberg, van Ginkel, & Homan, 2013). The role of early wins (P2) to build team confidence was noted in this study and in literature that identified the combination of quick wins and a positive environment cultivated by a leader as foundational to effective performance among transient team members (Ricketts & Willis, 2010).

The role of early strategizing (P37) and ensuring team members received clear and dynamically updated guidance (P1, P2, P4, P5, P6, P7, P8, P9, P10, P11, P12, P14,

P16, P18, P20, P22, P23, P24, P26, P27, P30, P31, P32, P33, P34, P35, P36, P37, P38) about desired outcomes figured prominently in successful team experiences identified in this study. Several studies similarly found that the use of early strategizing, even if the team holds only a brief discussion prior to commencing work, improved team effectiveness (Bechky & Okhuysen, 2011; Cantabrana, Minguell, & Tedesco, 2015; Crawford & LePine, 2014; Guglielmi et al., 2011; Dalenberg, Vogelaar, & Beersma, 2009; Rentsch, Delise, Salas, & Letsky, 2010). This was also true among knowledgebased or managerial teams (Honts, Prewett, Rahael, & Grossenbacher, 2012). Similarly, forming a charter that contains information on team rules, processes, and expected behavior can contribute to team effectiveness (Byrd & Luthy, 2010). Participants identified the need for team members to encourage that all team members' voices be heard (P5, P6, P8, P11, P14, P15, P18, P22, P26, P29, P36, P37), a practice that could stave off erroneous team member assumptions that groups generate more input to structured brainstorming per capita than if brainstorming is conducted individually first (Jones & Lambertus, 2014).

The environments in which teams succeed are as critical as the team member's knowledge, skills, and expertise. DoD team members experiencing HPT dynamics enjoyed environments conducive to trust (P1, P4, P5, P7, P8, P11, P13, P14, P18, P24, P26, P27, P28, P35, P37 P38), respect (P1, P4, P7, P8, P9, P12, P13, P18, P23, P24, P26, P28, P30, P31, P37, P38, P39), and egalitarian inclusivity (P3, P8, P10, P12, P20, P25, P29) that empowered the team to good effect (P1, P3, P8, P10, P12, P20, P22, P25, P29). These environments diverged from traditional, hierarchical DoD experiences in which a

person's rank or grade (P22, P27, P29) may affect the person's opportunity to provide input. Recent research emphasizes the desirability of egalitarian environments because such environments cultivate flexibility and yield positive team outcomes (Edmondson, 2012; Hollenbeck, Beersma, & Schouten, 2012; Mathieu, Tannenbaum, Donsbach, & Alliger, 2014). An environment of equality that allows team members an equal voice in team outcomes also are likely to entice new members to join the team (Poepsel & Schroeder, 2013). Similarly, team empowerment, identified in the literature as a positive predictor of team performance (Seibert, Wang, & Courtright, 2011), was reflected among study participant responses addressing a need for "empowerment to achieve success" (P9) and a desire for autonomy (P5, P8, P13, P14, P21, P26, P31, P37) supported by broad guidance on vision, mission, or goal requirements.

The role of trust in DoD teaming, identified by 16 participants (P1, P4, P5, P7, P8, P11, P13, P14, P18, P24, P26, P27, P28, P35, P37, P38), aligns with literature which found that trust is foundational to effective teaming (Jiang & Chen, 2011); contributes to team member satisfaction and overall team cohesion (DeOrtentiis, Summers, Ammeter, Douglas, & Ferris, 2013); fosters team member connections (Morita & Burns, 2013); affects positive collaboration (Dietrich, Eskerod, Dalcher, & Sandhawalia, 2010; Linden, 2010); may improve team performance (Wiedow, Konradt, Ellwart, & Steenfatt, 2013); and reduces negative conflict and high turnover rates among team members (Wise, 2014). Trust has separately been defined by a team member's level accountability and commitment to high quality outputs (Tseng & Yeh, 2013), the measures of commitment (P1, P2, P3, P4, P5, P6, P7, P8, P9, P11, P13, P14, P15, P16, P21, P22, P23, P24, P25,

P26, P27, P28 P29, P30, P32, P33, P34, P35) and accountability (P1, P2, P4, P11, P13, P22, P29, P32) were represented strongly among participant responses addressing RQ2. Too much trust, however, can negatively affect overall team performance (Wise, 2014) and potentially lead to groupthink as similarly noted by a study participant, P28.

DoD team members also enjoyed diverse environments (P3, P5, P6, P8, P14, P16, P20, P22, P26, P27, P32, P33, P36, P37, P38), comprised of military and civilian members as well as multiple generations (P8) and levels of expertise (P10). Diversity, particularly the inclusion of female group members, may reduce conflict (Lo Coco, Gullo, Lo Verso, & Kivlighan, 2013). Cognitive diversity, critical to achieving complementary skills (P1, P3, P4, P8, P10, P12, P20, P21, P25, P34), may lead to positive outcomes (van Knippenberg, van Ginkel, & Homan, 2013).

Success was possible when teams enjoyed freedom to determine team processes and approaches to desired outcomes (P5, P8, P10, P11, P21, P27). These observations align with recent research in which teams that delineate clear roles and cultivate environments of freedom for team members to express themselves were found to provide the security necessary for HPT development (Sink, Wilson, Brawley, & Odnokon, 2013). Edmondson (2012) also identified a measure of psychological safety in teaming that fosters an environment conducive to effective outcomes.

Shared leadership among team members (P8, P10) allowed teams to shift roles when a team member's specific expertise proved of most value to address the task as hand. This aligns with traditional definitions of HPT characteristics (Katzenbach & Smith, 2006) and with separate, recent research which found that shared leadership

positively affected team satisfaction (Wang, Waldman, & Zhang, 2014) and can reduce conflict while improving team trust and cohesion (Bergman, Rentsch, Small, Davenport, & Bergman, 2012). Shared leadership particularly has been found to contribute to team effectiveness when team members have a shared sense of purpose and enjoy positive collaboration and communication among members (Daspit, Tilllman, Boyd, & Mckee, 2013), a finding also partially observed in this study (P8, P10).

Yammarino, Mumford, Connelly, and Dionne (2010) separately noted that shared leadership is best suited for team-level interactions among military teams, a finding that diverges from the hierarchical nature of the military. Military leaders have been found to be successful when they were self-aware, critical thinkers, calm, perceived to be in control of the situation, resilient, and conscientious and sensitive to others' needs (Young & Dulewicz, 2008). The emphasis on individual leaders within the hierarchical nature of the military presents an interesting dichotomy in that military teams may be high-performing and still enjoy a hierarchical leadership dynamic, which Akdemir, Erdem, & Polat (2010) likened to the head or intellect driving the corporal team. HPTs traditionally are perceived to operate without a hierarchical leader (Katzenbach & Smith, 2006).

Anderson's (2010) study of public sector leaders found them to be changeoriented and achievement-motivated. Not all participants in this study, however, found this to be true as noted by the responses addressing challenges to successful teaming in RQ1, such as poor leadership (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P16, P18, P20, P21, P23, P27, P29, P31, P33, P34, P35, P37, P38) or unmotivated team members (P10, P14). Removing negative leadership or bad management can lead to naturally occurring positive outcomes (Ingvaldsen, Johnson, & Aarlott, 2014), a sentiment also noted by three study participants (P10, P23, P27). This occurs best when team members are committed, motivated, and positively identify with their teams without experiencing negative effects associated with poor managerial practices that would otherwise inhibit the team's independent, positive growth (Ingvaldsen, Johnson, & Aarlott, 2014).

In this study, 15 participants (P5, P9, P10, P11, P12, P14, P15, P19, P21, P22, P24, P28, P30, P32, P34) indicated that leaders played an important role in gaining senior champions and acting as a "buffer" (P8) for the team, a role similarly encouraged in the literature (Edmondson, 2012). High-performing DoD teams also enjoyed leaders who were cognizant of team and organizational contexts (P6, P8, P10, P11, P23, P27, P29). Collins and Cruickshank (2015) likewise noted the importance of a leader's ability to navigate such contexts while also being cognizant of external socio-political dynamics that could affect performance.

Eighteen study participants (P1, P4, P6, P7, P10, P11, P16, P19, P21, P22, P25, P26, P27, P28, P29, P33, P35, P37) noted the development of team cohesion through camaraderie and shared experiences. These observations align with studies in which the authors found that shared experiences are foundational to building shared beliefs, which can lead an HPT to satisfy complex goals (Dietrich, Eskerod, Dalcher, & Sandhawalia, 2010) and build transactive memory systems that lead to standardized responses even when verbal communications may not be present (Marques-Quinteiro, Curral, Passos, & Lewis, 2013). Shared experiences and the development of shared mental models have

also been found to strengthen a team's processes, responses, and effectiveness (Bechky & Okhuysen, 2011). Similarly, shared cognition, measured by a team's shared understanding, memories, and mental approaches, can improve team performance (Wildman, Salas, & Scott, 2014).

Participants provided numerous examples of commitment to one another through long nights (P37), through illness (P8), through mission-related challenges (P21), all of which underscored the ability to cultivate promptly team cohesion through shared experiences, a phenomenon also identified in recent research which noted how military teams form and develop bonds quickly (Perry Jr., Karney, & Spencer, 2013). Katzenbach and Smith (2006) similarly noted higher levels of esteem among HPTs, in part due to their higher levels of commitment to one another. Anecdotes from this study in which participants highlighted how members provided one another food and drink (P21, P22), offered to help with household chores (P8), and employed humor to contribute to team resilience (P4, P7, P8, P10, P11, P22, P24, P28, P31). These examples partially align with a recent finding in which the uniqueness of military experiences was shown to strengthen overall team member commitment and attachment leading to significant team member effort to protect the team's collective well-being (Veestraeten, Kyndt, & Dochy, 2014). These examples also partially align with another recent study in which the authors attributed a strong correlation between group cohesion and team-building to the "close proximity [in which team members work towards] shared goals [to obtain] a specific outcome" (Bruner, Eys, Beauchamp, & Côté, 2013, p. 31).

Opportunities to socialize outside work were important to developing team rapport, according to one participant, P19. This diverges with the literature as evidenced by studies encouraging socialization to be scheduled during work-time (Pentland, 2012) or at work (Cha, Park, & Lee, 2014) if such socialization is to contribute to stronger communication, collaboration, and cohesion. Team-building events focused simply on improving social cohesion have been found less effective in improving cohesion than purposeful, task-focused, work-based socialization (Fruhen & Keith, 2014). This divergence raises interesting questions about whether military team members benefit from non-work-based socialization because it allows team members the opportunity to set aside rank and uniform while getting to know teammates better outside the serious nature of military work.

Participants in this study also noted the criticality of their mission as a contributor to group cohesion (P3, P4, P7, P8, P11, P14, P24, P32). Military team cohesion has been distinguished as a unique sub-set due to the level of danger normally associated with its experiences, including potential loss of life (Siebold, 2011). Shared mental models among military team members also have been found particularly important to help military teams synergize efforts across multiple tasks and team member needs (DeChurch & Mesmer-Magnus, 2010a).

Teams must be allowed to fail if they are to learn and grow (Edmondson, 2012). The role of failure was observed among 32 responses (P1, P2, P3, P5, P6, P7, P8, P10, P11, P13, P14, P17, P18, P19, P20, P21, P22, P23, P24, P25, P26, P27, P38, P29, P30, P31, P32, P34, P35, P36, P37, P38) in this study; allowance to learn from failure was

found particularly useful when these opportunities could be practiced without leading to loss of life and in preparation for potential future, dangerous scenarios (P27). Small failures can contribute to team learning and to building team cohesion and trust as the team processes the failure as a shared memory (Edmondson, 2012).

Although it is tempting to simply amass a team populated with proven, high performers as described by a participant, P8, it is not a guarantee for success (de Waal, 2005; Lam, Van der Vegt, Walter, & Huang, 2011). Organizations must instead foster an environment in which even the smallest of voice can be heard (Edmondson, 2012), especially if a project is particularly important and in need of protection from failure. One participant, P27, noted that sometimes it is exactly that environment which affords an opportunity to develop the most junior team members.

RQ3: Measuring Team Excellence

Participants perceived their efforts contributed to organizational goals (P1, P3, P4, P5, P6, P8, P10, P11, P13, P16, P21, P24, P29, P30, P31, P33, P34, P35, P36, P38, P39) and created efficiencies (P8, P12, P17, P18) though participants indicated inconsistent awareness of specific performance metrics supporting these perceptions. The restricted nature of DoD work may have affected participant responses. An opportunity likely exists, however, to strengthen how performance is defined and measured and how DoD team members measure their own individual contributions to performance metrics. This finding is consistent with calls for further research to examine how organizations' leaders encourage teaming practices during times of organizational economic challenges (Tannenbaum, Mathieu, Salas, and Cohen, 2012). As noted among responses presented

in Chapter 4, at times even the absence of resources provides an opportunity to innovate or, to *adapt and overcome*.

Leaders are responsible for helping the team to identify and understand the team's capacity to exceed output expectations (Edmondson, 2012); 21 participants (P1, P8, P9, P12, P13, P14, P16, P17, P18, P19, P21, P23, P24, P26, P27, P30, P31, P32, P34, P37, P38) noted the role of such leadership in effective team experiences. The role of team leaders in measuring team success is more than simply counting output, particularly in a knowledge-based dynamic measured by qualitative metrics, such as decision-maker support (P4, P10, P16, P21, P24, P26, P29, P34, P38). A leader's ability to balance envisioning success with setting achievable goals was critical to success. A participant, P29, identified leaders who set unreasonable expectations or who constantly shifted expectations as being less successful in encouraging outcomes.

The introspection necessary to apply past lessons learned to new dynamics is not only a function of a team member's cognition, but can be improved through effective team leadership, particularly based on the individual leader's ability to foster trust; membership in acceptable groups, such as a prestigious military unit; or the leader's reputation for excellence among others whose opinions team members respect (Wildman, Shuffler, Lazzara, Fiore, Burke, Salas, & Garven, 2012). This finding was observed among two participant responses in which one participant, P33, expressed appreciation for the interview questions posed and another expressed appreciation for the "opportunity to share my experiences" (P37). This suggests a partial alignment with Katzenbach and

Smith's (2006) identification of positive well-being owing to the commitment and esteem HPT members enjoy.

Conflict may affect team performance, particularly if it is relationship-based (de Wit, Greer, & Jehn, 2012). Conflict resulting from stress may be remedied with a focus on task completion, as one participant, P19, noted. This assertion aligned with Sherif's (1958) earlier finding that setting compelling goals shared among team members helped reduce conflict by refocusing the team on desired outcomes.

Finally, organizations can improve performance measurement by clearly defining its vision in a way that is meaningful to all employees, according to a participant, P10. James (2014) found that clearly identifying and broadly communicating an organization's values while aligning them with individual employee values can lead to desired outcomes. The clear link between team member output and an organization's goals can also contribute to the team member's perception that he or she and his or her work is valued, as noted by participant responses (P4, P10, P13, P37).

RQ4: Expanding Team Excellence

Military team members may benefit from *swift trust* (Meyerson et al., 1996, as cited in Wildman, Shuffler, Lazzara, Fiore, Burke, Salas, & Garven, 2012), whereby trust is quickly formed based on predispositions informed by other similar settings. Indeed, each team experience in a military context affords a DoD team member an opportunity to transfer knowledge gained at present to a future team dynamic based on the accumulation of experientially informed predispositions (Wildman, Shuffler, Lazzara, Fiore, Burke, Salas, & Garven, 2012). Team members who participated in this study similarly had

varied experiences in sharing effective teaming practices with others in their organizations, suggesting a second area of opportunity for practitioner consideration.

Transferring success across team member dynamics and experiences is difficult and sometimes influenced by differing team constructs (P1, P31) or team member personalities (P8, P10, P12, P18, P29, P38, P39). This observation aligned with Sherif's (1949) finding that a team member's success in one situation may not be replicated across other experiences if the context of the role or situation changed.

The use of *after action reviews* (P22), lessons learned (P6, P12, P22, P24, P30, P31) and peer mentoring (P9, P10, P11, P16, P39) to discuss best practices or to work through and provide remedy for identified areas of deficiency. Similarly, Arnulf (2012) found that cultivating practices that encourage team member reflection might improve a team's effectiveness because it helps the team to assess and adjust to emergent situations more accurately. Edmondson (2012) also noted team effectiveness could be improved if a team was willing to reflect on lessons learned from failure as well as success.

Only ten study participants (P4, P5, P1, P17, P22, P24, P25, P26, P34, P38) of the 39 who provided responses identified the availability of a formalized training program through which to share best practices. The overall lack of consistent formalized programs and continuous learning environments suggests an area for practitioner development to improve team effectiveness. Teams seeking to improve outcomes need to develop space for planning shared future outcomes, reflecting on the team's experiences, agreeing upon team processes and goals, and communicating with one another (Derksen, Caluwé, Rupert, & Simmons, 2014).

Overall, many aspects of this study aligned with team literature in general which suggests that one's team experience is unique to membership capacity, focus, organizational context, and the ability to build team cohesion (Edmondson, 2012). Divergence emerged, however, when the role of humor and socialization outside work were compared. DoD member participants in this study found usefulness in pursuing both humor (P4, P7, P8, P10, P11, P22, P24, P28, P31) and socialization outside work (P19) to foster team cohesion (P21) and build interpersonal commitment (P15, P19, P22, P24).

The assertion that transferring one HPT's practices and successes to another team is highly difficult (Katzenbach & Smith, 2006) was upheld by the results of this study. The study participants' rich descriptions, however, offered confirmation that DoD team members working in office-based environments do experience characteristics associated with HPTs and gain efficiencies for their organizations. These experiences are highlighted by commitment to mission and one another in the form of exceptional camaraderie.

Limitations of the Study

No study is perfect; this study is no exception. This study was limited by the methodology selected. No validity issues were identified following data collection, however, suggesting this study's processes and instrument may be of use in future studies. Additionally, the study was limited by the sample selected.

Bell and Morse (2013) found that the use of both quantitative and qualitative assessments provided a more complete understanding of group dynamics. As noted in

Chapter 1, this study was limited by its qualitative nature, which focused on unique experiences. The study may have been limited by drawing from all branches of service and civilians. Concentrating on team experiences among members of one specific branch of service or solely civilians may have yielded different themes from those emergent in the collected data. The study also may have been limited by its failure to focus on one organization or multiple offices within that organization to determine whether the resultant themes were intrinsic to that organization's context or personnel. This study's sample, however, reflects strength of experiential and branch-of-service diversity that still yielded saturation and synergy among many of the themes.

The study was also limited by other participant demographics, such as years of experience (Appendix C) or age. A study focused on examining participant responses solely by the participants' years of experience may have altered the findings.

Alternatively, collecting data from participants solely within a certain generational cohort may have yielded different findings related to effective team experiences. An opportunity exists, however, for future studies to limit samples to within these experiential and generational demographics and then compare those findings with the results of this study to examine the nature of shared findings or, alternatively, deviations.

Recommendations

Tannenbaum, Mathieu, Salas, & Cohen (2012) encouraged exploring the synergy of team theory and practice through the examination of how leaders encourage self-directed team practices during times of organizational difficulties. The use of qualitative case studies (Aime, Humphrey, Derue, & Paul, 2014; Cronin, Weingart, & Todorova,

2011) and interviews (Tannenbaum, Mathieu, Salas, & Cohen, 2012) have been encouraged to improve understanding of team dynamics (Aime, Humphrey, Derue, & Paul, 2014; Cronin, Weingart, & Todorova, 2011) and how teams experience dynamic organizational contexts (Tannenbaum, Mathieu, Salas, & Cohen, 2012). In this study, I sought to examine the alignment between existing literature on team dynamics and contemporary DoD team member experiences, to discern best practices, and potentially to aid DoD practitioners who wish to encourage HPT practices among their teams. Heavy reliance upon Katzenbach and Smith's (1993; 2006) seminal definition of HPTs determined the key components that contributed to success, specifically

- a small number of people
- with complementary skills...
- who are committed to a common purpose, set of performance goals, and approach
- for which they hold themselves mutually accountable (Katzenbach & Smith, 1993, p. 112). . .
- [and] who are deeply committed to one another's personal growth and success. (Katzenbach & Smith, 2006, p. 92)

Recommendations: Practitioners

Training and identification of effective leaders have been found to lead to improved team effectiveness (Warrick, 2014). The relative lack of responses confirming that DoD team members were able to independently identify key components of HPTs suggests that DoD team members may benefit from training that focuses on these key

components. The Center for Army Lessons Learned (2015) published a handbook intended to "build adaptive high-performance teams" (title page). The handbook incorporates many checklists and team activities intended to cultivate characteristics of HPTs among unified action teams, or teams that are brought together for a distinct purpose and often comprised of individuals from multiple agencies (Center for Army Lessons Learned, 2015). Such teams may also be referred to as *swift starting action teams* (STATs), which are comprised of functionally interdependent experts with no prior shared experiences who are expected to produce quickly (Wildman, Shuffler, Lazzara, Fiore, Burke, Salas, & Garven, 2012). Ray and Bronstein (1995), however, would have classified either of these types of teams as task forces and not true teams.

Although not precisely aligned with Katzenbach and Smith's (2006) writings on HPTs, the handbook does offer a starting point for practitioners who wish to quickly learn about some aspects of HPT characteristics (e.g. shared sense of purpose, understanding team member competencies, and the need for agreed upon goals) (Center for Army Lessons Learned, 2015, p. 5). The handbook, however, does not offer the depth of discussion on all aspects of Katzenbach and Smith's (1993, 2006) seminal definition of HPTs, such as deep commitment to team members and their shared organization. The handbook's focus on team members who are committed predominantly to their respective and disparate parent organizations may be at odds with the type of commitment encouraged by Katzenbach and Smith (1993, 2006). While at least one DoD participant in this study, P18, identified an example of a team strong

enough to overcome perceived overly restrictive parent organization loyalties and guidance, it was not without challenge.

The use of assessments to determine team member skills and interpersonal synergy has been found to improve team interactions and outcomes (Franz, 2012). As noted by study participants (P1, P27), however, the use of formal assessments may be cost or functionally prohibitive in the DoD environment. Practitioners may still develop informal assessments crafted for local contexts that ask individuals to self-assess competencies in areas practitioners determine necessary for effective team processes (e.g. functional expertise, certifications, areas of knowledge or experience) (Franz, 2012). Practitioners are discouraged from attempting to independently administer personality assessments, but may gain benefit from team interventions that encourage team members to describe their best and worst team experiences (Franz, 2012). The results could be compared among the group and synthesized to help frame expectations for desirable and, conversely, unacceptable team member behaviors or practices (Franz, 2012). The identification of individual preferences may also yield insights to practitioners into individual team member needs and work styles so that practitioners may ensure team diversity to optimize outcomes.

In keeping with Katzenbach and Smith's (2006) findings, practitioners may emphasize individual team member responsibility through the use of facilitated discussions about how team members are mutually accountable for outcomes while addressing the interdependence between level of team member skill and outcome. Such discussions may improve team member awareness of desired teaming goals and

predispose the team to greater cohesion and success when done in a way that suggests a predominant focus on the task (Pentland, 2012). Guided *after action* discussions or debriefs can also help team members reflect deeply on their experiences, increasing the probability that accurate knowledge will be carried into the team members' next team context.

An arguably transactional focus on the team member may inadvertently give the impression of an artificial interest in the person. For example, the Center for Army Lessons Learned (2015) authors encouraged the development of a "'you scratch my back, I scratch yours' mentality [to foster] more trust across the boundaries of level, organization, function, and culture" (Center for Army Lessons Learned, 2015, p. 34). This is unlikely, however, to build the truly deep levels of commitment and trust necessary for HPTs (Katzenbach & Smith, 1993; 2006). Rather, shared successes and experiences can foster effective group cohesion (Katzenbach & Smith, 2006). Mentoring team members (P9, P10, P16, P27) or conscientiously placing high-performing teammates in a central role also may lead to increased performance by influencing others to emulate the high-performing teammate's typically higher output levels (Li, Zhao, Walter, Zhang, & Yu, 2015).

The importance of discussing lessons learned (Edmondson, 2012) and holding purposeful reviews of "shared actions and decisions" (Center for Army Lessons Learned, 2015, pp. 15, 30-31) aligns with the data presented in this study addressing RQ4, which underscored study participant support for and positive outcomes owing to such reviews. Ensuring team members document valuable lessons learned and make them available to

others is a deficient practice in many organizations, according to this study's participants, and offer practitioners an opportunity to improve. Such discussions may be improved if the practitioner is able to observe and positively influence how team members communicate, including verbal intonation, length of discourse, nonverbal cues, and, critically, how team members interact outside formal structures (Pentland, 2012).

Practitioners should also exercise caution when encouraging "close socialization...to foster further growth of mutual confidence and trust among members of teams" (Center for Army Lessons Learned, 2015, p. 45). As noted earlier, forced socialization outside work is not usually successful (Fruhen & Keith, 2014), but several of this study's participants (P21, P22, P19) found utility in such events. Still, meaningful socialization requires time and shared experiences, particularly shared goal satisfaction successes, to build deep and effective commitment (Katzenbach & Smith, 1993, 2006).

Practitioners also may use the examples derived from this study as a means to make comparisons with their own experiences (Leach & Mayo, 2013; McAlearney, Garman, Song, McHugh, Robbins, & Harrison, 2011). Tailored approaches to improved teaming practices or knowledge sharing can positively contribute to team effectiveness and job satisfaction when crafted in a way that considers team and organizational context as well as strategy and leadership dynamics (Körner, Wirtz, & Göritz, 2015). For example, practitioners may work to develop a safe environment in which all are allowed the opportunity to contribute to their potential while making allowance for learning from failure (Edmondson, 2012) and cultivating appreciation for the positive role that humor

(P4, P7, P8, P10, P11, P22, P24, P28, P31) can play in diffusing stress and building team cohesion.

Team members may benefit from opportunities to exercise shared leadership roles to develop leadership skills and experience (Katzenbach & Smith, 2006). Practitioners may consider mapping the team's network not only to comprehensively understand the team and networks nodes that can strengthen cooperation, but also to facilitate intervention to reduce conflict (Wu, Wu, Xie, & Lu, 2015). Similarly, practitioners may introduce measured levels of task conflict to refocus the team on tasks instead of personalities should personality conflicts derail team outcomes (Bang & Park, 2015).

The role of team leaders cannot be overemphasized, based on the data collected during this study. Practitioners are encouraged to impress upon leaders their "powerful responsibility" (P8) and the impact their actions, inconsistent reward practices, and negative approaches to leadership have on team member cohesion, trust, and commitment. Practitioners may also encourage group success by calling upon leaders to be authentic, positive, ethical, and transparent (Rego, Reis Jr., & Cunha, 2015).

Addressing team member and leadership deficiencies may be remedied through specific skill training (Belbin, 2010), encouraging military members to concertedly and fully optimize his or her competencies (Young & Dulewicz, 2008), or by employing feedback loops in safe environments (Edmondson, 2012) that offer opportunity for constructive criticism of process or person as required to improve output and outcomes respectively.

Holding periodic inter-team discussions to derive effective teaming practices from recognized HPTs within organizations can also improve knowledge transference. Key

best practices can be shared via written and in-person discussions (Edmondson, 2012). DoD team members may benefit from scheduling discussions that focus on best practices and how they may be applied across teams that have similar functions or output; such reviews of lessons learned can then be codified for future reference and employment (P24). Such practices also may necessitate organizational change through the use of Lewin's (as cited in Shafritz, Ott, & Jang, 2011) three phases: unfreezing, movement, freezing. That is, unfreezing the organizational team members from a current, undesired team practice; moving the team members towards the desired practice, such as sharing lessons learned; then freezing the new, desired habit in place to ensuring longevity of practice.

Study participant examples of well-developed DoD HPTs (P8, P10, P18) highlighted interdependent and competent team members whose shared sense of focus on the mission enabled them to overcome challenges and foster interpersonal commitment. These team experiences align with a recent study in which team empowerment was found to contribute positively to team performance (Seibert, Wang, & Courtright, 2011). In two examples, personnel were purposefully chosen—a dynamic unusual to the DoD team construct. Where possible, practitioners may seek information about a potential new team member's experiences and predispositions to place the person on a team that optimizes the individual's best potential to contribute to the mission based on the individual's skills, expertise, and personality.

DoD team members in this study (P1, P6, P9, P10, P11, P14, P16, P17, P20, P21, P27, P29, P30, P31, P33, P36) identified inconsistent experiences when attempting to

influence others to adopt characteristics of their successful or HPT examples. This suggests an opportunity for practitioners to develop more purposeful venues for such discussions. The sharing of such knowledge may improve operational efficiencies given the perceptions among participants that HPTs contribute to organizational goals and saved money and time in some participant examples.

Lastly, practitioners seeking to achieve one participant's assessment that "we did our job, and we did it well" (P29) may consider Akdemir, Erdem, and Polat's (2010, pp. 157-171) characteristics of high-performing organizations to guide development of broader efforts to foster such winning teams. Study participants also identified many of Akdemir, Erdem, and Polat's (2010) characteristics as having an effect on their own experiences. The authors' list is offered in adapted form again here and includes

- a clearly comprehended vision and shared values;
- holding people accountable;
- well-defined goals;
- excellent interpersonal and organizational communication;
- trust that encourages interdependence;
- socialization and fun;
- decentralized decision-making, preferably at the lowest level;
- training that improves performance;
- feedback that can be acted upon;
- exemplary focus on the customer;
- metrics for measuring output across all organizational levels;

- managing change purposefully and well;
- embracing innovation;
- being a part of a team;
- shared leadership;
- an incentive system that includes team awards;
- identifying and retaining the best employees possible;
- maintaining balance between work and nonwork priorities;
- intellectual, experiential, and interpersonal diversity;
- rewards that satisfy motivational needs;
- compensation and appraisal programs that encourage effective performance;
- effective sharing of knowledge;
- purposeful work, good workplace conditions, career opportunity, and empowerment;
- preparing employees to assume greater responsibility as people leave or retire;
- continually addressing organizational opportunities and threats;
- ethics-based practices and respecting one another.

The characteristics can serve as a checklist to aid organizational members in determining the presence and depth of such practices at the organization under review or simply to guide organizational leader or team member discussions in their pursuit of high-performing status. Alternatively, organizational leaders may turn to Albert & Fetzer's (2005) aspects of team effectiveness shown in Table 1 of this study.

Recommendations: Future Study

Many themes for potential future study emerged from participant responses and the collective findings of this study. The identification by so many participants of the role of humor in DoD teaming experiences (P4, P7, P8, P10, P11, P22, P24, P28, P31) lends itself to potential future examination, although Gockel & Kerr (2015) wrote that the team member subjectivity to humor renders humor an unreliable predictor of social cohesion. The focus on humor among DoD teams could be viewed, however, through multiple lenses, such as that of providing psychological safety (Edmondson, 2012) or encouraging resilience in times of challenge. The use of humor in an hierarchical environment, such as that of the military, also invites further examination of how such use is adjusted to reflect team members' power distance preferences (Cole, Carter, & Zhang, 2013) or whether the practice alters over time and is reflective of the tendency for pressurized teams to revert to hierarchical team practices (Gardner, 2012a).

Berlin, Carlström, and Sandberg's (2012) encouragement of a more critical review of team theories and the models that accompany them highlighted that traditional models advocating for the use of well-developed teams with a lengthy shared history may not be appropriate for every situation. Others emphasized the value of examining unique team member perspectives based on their experiences (Mathieu, Tannenbaum, Donsbach, & Alliger, 2014). Viewed within the context of this study, identification and examination of long-term DoD office-based teams may provide additional insights into how such teams overcome challenges relative to long-term teams in the private sector; particular

focus on individual and collective incentives could contribute further to the literature on group cohesion.

Future studies might also examine the extent to which DoD team members enjoy strong team cohesion leading to the impression that the bond is as strong as that of a "family" (P8, P24). Additional study of other DoD team member experiences, such as those in a specific office or among geographically dispersed team members sharing the same functional focus, may yield a more informed assessment of how broadly high-performing teaming is experienced among DoD members and how this phenomenon is observed among differing functional offices and organizations or wholly intact teams. Additional research on the role of multigenerational team members in contributing to team outcomes (P8) or the interplay between military and civilian team members (P10) may also provide insights into how to optimize these teaming dynamics. Similarly, the use of virtual teams (P11) also suggests an opportunity to examine how DoD virtual teams communicate and address conflict among its members (Stark, Bierly & Harper, 2014).

Implications

This study, inspired in part by Lewin's (1943) call to understand groups, group dynamics, and the context in which they exist practically as well as theoretically, may have contributed if but in very small part to a call for studies focused on military member experiences (Castaño, Watts, & Tekleab, 2013) and a separate call for an examination of how public sector teams transition from more traditional hierarchical leadership approaches to task achievement approaches (Chin, 2015). The hierarchical nature of the

DoD is unlikely to change given the important roles leaders hold in the DoD. Many of the successful teams identified by this study's participants (P1, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P16, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33, P37, P38, P39), however, found a balance between hierarchy and shared leadership. The examination of this study's findings may contribute to positive social change through the identification of efficient public sector team practices, effective team constructs, mindful cultivation of team cohesion, and remedies for team conflict that may deter desired outcomes. Collectively, these phenomena may lead to cost savings that inspire citizen confidence in DoD efforts to improve operational processes which address fiscal challenges and respect the value of finite taxpayer dollars.

This study highlighted the deeply shared sense of purpose and commitment to mission among DoD team members and may have contributed to other efforts to address a noted decline in case studies examining team performance (Srivastava, Rogers, & Lettice, 2013). Additionally, this study may have satisfied partially a call to examine team member's unique experiences (Tannenbaum, Mathieu, Salas, & Cohen, 2012) and a separate call to examine, through techniques that encourage self-described experiences, how swift starting action teams develop trust (Wildman, Shuffler, Lazzara, Fiore, Burke, Salas, & Garven, 2012), particularly given these teams' general lack of time to develop fully as a team prior to producing desired outcomes. It is also my sincere hope that this study may add to robust discussion among DoD team members and practitioners who are committed to improving team efficiencies and effectiveness in this era of declining personnel and other important resources.

Conclusion

DoD team member participants in this study confirmed that they are able to develop and enjoy HPTs in an office environment, even in the absence of all necessary resources. These highly complex and adaptive small DoD groups are unique and rare, a finding shared with Katzenbach and Smith's studies (1993; 2006) of HPTs. Although this study focused only on a small sub-set of the vast pool of DoD professionals, the findings are cause for optimism that these team members will carry their experiences with them as they rotate between duty stations and potentially apply lessons learned in their new dynamics.

Additional study and practitioner-led implementation of training, discussions, or communities of interest that highlight the characteristics and benefits of inculcating HPT practices may improve organizational output amid increasing demands on constrained DoD personnel and budgets affecting military readiness (Carter, 2013). Deep team member reflection about successful experiences can sustain lessons learned. DoD teams have an innate advantage in the strength of their shared sense of purpose. Participant experiences captured herein highlight that dedication to mission and fellow DoD team members, accountability, and trust among team members can overcome many operational and fiscal challenges. Successful high-performing DoD teams are particularly effective when the outcome is clearly defined, when belief in the mission is strong, and when team members prioritize sustained commitment to the mission and one another. These teams are making a difference and attaining excellence through high-performance that is guided by Department standards and aligned with national security objectives.

References

- Abbott, I., & Bush, T. (2013). Establishing and maintaining high-performing leadership teams: A primary perspective. *International Journal of Primary, Elementary and Early Years Education*, 41(6), 586-602. doi:10.1080/03004279.2011.611813
- Adelman, C. (1993). Kurt Lewin and the origins of action research. *Educational Action Research*, *I*(1), 7-24. doi:10.1080/0965079930010102
- Agrawal, V. (2012). Managing the diversified team: Challenges and strategies for improving performance. *Team Performance Management*, 18(7/8), 384-400. doi:10.1108/13527491211281129
- Aguado, D., Rico, R., Sánchez-Manzanares, M., & Salas, E. (2014). Teamwork competency test (TWCT): A step forward on measuring teamwork competencies.

 Group Dynamics: Theory, Research, and Practice, 18(2), 101-121.

 doi:10.1037/a0036098
- Aime, F., Humphrey, S., Derue, D. S., & Paul, J. B. (2014). The riddle of heterarchy:

 Power transitions in cross-functional teams. *Academy of Management Journal*,

 57(2), 327-352. doi:10.5465/amj.2011.0756
- Akdemir, B., Erdem, O., & Polat, S. (2010). Characteristics of high performance organizations. Suleyman Demirel University *Journal of Faculty of Economics* and Administrative Sciences, 15(1), 155-174. Retrieved from http://m360.sim.edu.sg/Publications/singapore-management-reviews/Pages/SMR-Overview.aspx
- Albert, S. R., & Fetzer, R. C. (2005). Smart community networks: Self-directed team

- effectiveness in action. *Team Performance Management, 11*(5/6), 144-156. doi:10.1108/13527590510617738
- Albrecht, S., & Travaglione, A. (2003). Trust in public-sector senior management.

 International Journal of Human Resource Management, 14(1), 76-92.

 doi:10.1080/09585190210158529
- Alexander, D., & Shalal, A. (2014, February 24). Budget cuts to slash U.S. Army to smallest since before World War Two. *Reuters*. Retrieved from http://www.reuters.com/article/idUSBREA1N1I020140224?irpc=932#editions
- Allen, N. J., & Hecht, T. D. (2004a). The "romance of teams": Toward an understanding of its psychological underpinnings and implications. *Journal of Occupational and Organizational Psychology*, 77, 439-461. Retrieved from http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)2044-8325
- Allen, N. J., & Hecht, T. D. (2004b). Further thoughts on the romance of teams: A reaction to the commentaries. *Journal of Occupational and Organizational Psychology*, 77, 485-491. Retrieved from http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)2044-8325
- Ambrose, S. E. (2001). *Band of brothers: E Company, 506th Regiment, 101st Airborne, from Normandy to Hitler's eagle nest.* New York City: Simon and Schuster.
- Anantaraman, V. (1993). Evolving concepts of organisational [sic] leadership.

 Singapore Management Review, 15(2), 17-32. Retrieved from

 http://m360.sim.edu.sg/Publications/singapore-management-reviews/Pages/SMR-Overview.aspx

- Andersen, J. A. (2010). Public versus private managers: How public and private managers differ in leadership behavior. *Public Administration Review*, 70(1), 131-141. doi:10.1111/j.1540-6210.2009.02117.x
- Andrews, R., & Boyne, G.A. (2010). Capacity, leadership, and organizational performance: Testing the black box model of public management. *Public Administration Review*, 70(3), 443-454. doi:10.1111/j.1540-6210.2010.02158.x
- Andrews, R., Boyne, G., & Walker, R. M. (2011). The impact of management on administrative and survey measures of organizational performance. *Public Management Review*, *13*(2), 227-255. doi:10.1080/14719037.2010.532968
- Andrews, J., Cameron, H., & Harris, M. (2008). All change? Managers' experience of organizational change in theory and practice. *Journal of Organizational Change Management*, 21(3), 300-314. doi:10.1108/09534810810874796
- Angus-Leppan, T., Metcalf, L., & Benn, S. (2010). Leadership styles and CSR practice:

 An examination of sensemaking institutional drivers and CSR leadership. *Journal of Business Ethics*, 83, 189-213. doi:10.1007/s10551-009-0221-y
- Ansari, S. M., Fiss, P. C., & Zajac, E. J. (2010). Made to fit: How practices vary as they diffuse. *Academy of Management Review*, *35*(1), 67-92. doi:10.5465/AMR.2010.45577876
- Arnulf, J. K. (2012). Organizational change capacity and composition of management teams: A visualization of how personality traits may restrain team adaptability. *Team Performance Management*, 18(7/8), 433-453.

 doi:10:1108/13527591211281156

- Asgari, A., Silong, A. D., Ahmad, A., & Samah, B. A. (2008). The relationship between transformational leadership behaviors, organizational justice, leader-member exchange, perceived organizational support, trust in management and organizational citizenship behaviors. *European Journal of Scientific Research*, 23(2), 227-242. Retrieved from http://www.eurojournals.com/ejsr.htm
- Aubé, C., & Rousseau, V. (2011). Interpersonal aggression and team effectiveness: The mediating role of team goal commitment. *Journal of Occupational and Organizational Psychology*, 84(3), 565-580. doi:10.1348/096317910X492568
- Aubé, C., & Rousseau, V. (2014). Counterproductive behaviors: Group phenomena with team-level consequences. *Team Performance Management*, 20(5/6), 202-220. doi:10.1106/TPM-05-2013-0014
- Bang, H., & Park, J. G. (2015). The double-impact sword of task conflict: Its impact on team performance. *Social Behavior and Personality*, 43(5), 715-728.
 doi:10.2224/sbp.2015.43.5.715
- Barlage, M., van den Born, A., van Witteloostuijn, A., & Graham, L. (2014). Estimating public performance bias through an MTMM model: The case of police performance in 26 European countries. doi:10.1080/01442872.2013.875154
- Bazeley, P., & Jackson, K. (2013). *Qualitative data analysis with NVivo* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Bechky, B. A., & Okhuysen, G. A. (2011). Expecting the unexpected? How SWAT officers and film crews handle surprise. *Academy of Management Journal*, *54*(2), 239-261. doi:10.5465/AMJ.2011.60263060

- Beersma, B., Hollenbeck, J. R., Humphrey, S. E., Moon, H., Conlon, D. E., & Ilgen, D.
 R. (2003). Cooperation, competition, and team performance: Toward a contingency approach. *Academy of Management Journal*, 46(5), 572-590.
 doi:10.2307/30040650
- Belbin, R. M. (2010). *Team roles at work* (2nd ed.). London: Elsevier Butterworth-Heinemann.
- Bell, S., & Morse, S. (2013). An approach to comparing external and internal methods for analyzing group dynamic. *Group Dynamics: Theory, Research, and Practice,* 17(4), 281-298. doi:10.1037/a0034623
- Bennett, J., Pitt, M., & Price, S. (2012). Understanding the impact of generational issues in the workplace. *Facilities*, 30(7/8), 278-288. doi:10.1108/02632771211220086
- Bergman, J. Z., Rentsch, J. R., Small, E. E., Davenport, S. W., & Bergman, S. M. (2012).

 The shared leadership process in decision-making teams. *The Journal of Social Psychology*, *152*(1), 17-42. doi:10.1080/00224545.2010.538763
- Berlin, J. M. (2014). Common incentives for teamwork—the unspoken contract's significant. *Team Performance Management*, 20(1/2), 65-80. doi:10.1108/TPM-04-2013-0011
- Berlin, J. M., Carlström, E. E., & Sandberg, H. S. (2012). Models of teamwork: Ideal or not? A critical study of theoretical team models. *Team Performance Management*, 18(5/6), 328-340. doi:10.1108/13527591211251096
- Bezrukova, K., Jehn, K. A., Zanutto, E. L., & Thatcher, S.M.B. (2009). Do workgroup faultlines help or hurt? A moderated model of faultlines, team identification, and

- group performance. *Organization Science*, 20(1), 35-50. doi:10.1287/orsc.1080.0379
- Bezrukova, K., Spell, C. S., Caldwell, D., & Burger, J. M. (2015, July 13). A multilevel perspective on faultlines: Differentiating the effects between group- and organizational-level faultlines. *Journal of Applied Psychology*. *101*(1), 86-107. doi:10.1037/apl0000039
- Bhat, J. S. A. (2010). Managing innovation: Understanding how continuity and change are interlinked. *Global Journal of Flexible Systems Management*, 11(1&2), 63-74. Retrieved from http://www.springer.com/business+%26+management/journal/40171
- Blair, R. (2001). Managing urban growth: Can the policy tools approach improve effectiveness? *Public Works Management Policy*, *6*(2), 102-113. doi:10.1177/1087724X0162004
- Blazovich, J. L. (2013). Team identity and performance-based compensation effects on performance. *Team Performance Management*, 19(3/4), 153-184. doi:10.1108/TPM-11-2012-0035
- Boedker, C., Cogin, J., Langford, P., Meagher, K., Mouritsen, J., Runnals, M., . . . Vidgen, R. (2011). Leadership, culture and management practices of high performing workplaces in Australia: Literature review and diagnostic instruments. Retrieved from http://www.unsw.edu.au
- Bonebright, D. A. (2012). 40 years of storming: A historical review of Tuckman's model of small group development. *Human Resource Development International*, 13(1),

- 111-120. doi:10.1080/13678861003589099
- Braun, F. C., Avital, M., & Martz, B. (2012). Action-centered team leadership influences more than performance. *Team Performance Management*, *18*(3/4), 176-195. doi:10.1108/13527591211241015
- Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel meditation model of trust. *The Leadership Quarterly*, *24*(1), 270-283. doi:10.1016/j.leaqua.2012.11.006
- Brewer, G. A., & Walker, R. M. (2009). The impact of red tape on governmental performance: An empirical analysis. *Journal of Public Administration Research* and Theory, 20(1), 233-257. doi:10.1093/jopart/mun040
- Bruner, M. W., Eys, M. A., Beauchamp, M. R., & Côté, J. (2013). Examining the origins of team building in sport: A citation network and genealogical approach. *Group Dynamics: Theory, Research, and Practice, 17*(1), 30-42. doi:10.1037/a0030114
- Buengeler, C., & Den Hartog, D. N. (2015). National diversity and team performance:

 The moderating role of interactional justice climate. *The International Journal of Human Resource Management*, 26(6), 831-855.

 doi:10.1080/09585192.2014.991345
- Buljac, M., Van Woerkom, M., & Van Wijngaarden, J. D. H. (2013). Are real teams healthy teams? *Journal of Healthcare Management*, *58*(2), 92-107. Retrieved from: www.ache.org
- Burwell, S. M. (2013, November 7). Impacts and costs of the government shutdown.

 Retrieved from http://www.whitehouse.gov/blog/2013/11/07/impacts-and-costs-

- government-shutdown
- Bush, T., Abbott, I., Glover, D., Goodall, J., & Smith, R. (2012). Establishing and developing highly performing leadership teams. Nottingham: National College for School Leadership. Retrieved from http://www.education.gov.uk/nationalcollege
- Byrd, J. T., & Luthy, M. R. (2010). Improving group dynamics: Creating a team charter.

 **Academy of Educational Leadership Journal, 14(1), 13-26. Retrieved from http://www.alliedacademies.org/public/journals/journaldetails.aspx?jid=5
- Cannon, M. D., & Edmondson, A. C. (2001). Confronting failure: Antecedents and consequences of shared beliefs about failure in organizational work groups.

 **Journal of Organizational Behavior, 22(2), 161-177. Retrieved from http://www.jstor.org/stable/3649589
- Cantabrana, J. L. L., Minguell, M. E., & Tedesco, J. C. (2015). Inclusion and social cohesion in a digital society. *RUSC: Universities and Knowledge Society Journal*, *12*(2), 44-58. doi:10.7238/rusc.v1212.2459
- Carboni, I., & Ehrlich, K. (2013, July-August). The effect of relational and team characteristics on individual performance: A social network perspective. *Human Resource Management*, *52*(4), 511-535. doi:10.1002/hrm.21539
- Carter, A. B. (2013, November 13). Manage defense spending through "better buying power," not sequestration. *Defense One*. Retrieved from: http://www.defenseone.com/ideas/2013/11/carter-manage-defense-spending-through-better-buying-power-not-sequestration/73739/

- Castaño, N., Watts, T., & Tekleab, A. G. (2013). A reexamination of the cohesion-performance relationship meta-analyses: A comprehensive approach. *Group Dynamics: Theory, Research, and Practice, 17*(4), 207-231. doi:10.1037/a0034142
- Castka, P., Bamber, C. J., Sharp, J. M., & Belohoubek, P. (2001). Factors affecting successful implementation of high performance teams. *Team Performance Management: An International Journal*, 7(7/8), 123-134. Retrieved from http://www.emeraldinsight.com/journal/tpm
- Center for Army Lessons Learned (2015, January). Leader's guide to team building:

 Building adaptive high-performance teams. (Handbook No. 15-02). Retrieved

 from http://usacac.army.mil/sites/default/files/publications/15-02.pdf
- Cha, M. Park, J.-G., & Lee, J. (2014). Effects of team member psychological proximity on teamwork performance. *Team Performance Management*, 20(1/2), 81-96. doi:10.1108/TPM-03-2013-0007
- Chen, C. A., & Bozeman, B. (2013). Understanding public and nonprofit mangers' motivation through the lens of self-determination theory. *Public Management Review*, *15*(4), 584-607. doi:10.1080/14719037.2012.698853
- Chen, F., Zhang, L., & Latimer, J. (2014). How much has my co-worker contributed?

 The impact of anonymity and feedback on social loafing in asynchronous virtual collaboration. *International Journal of Information Management*, *34*(5), 652-659.

 Retrieved from http://www.elsevier.com/locate/ijinfomgt
- Chin, R. J. (2015). Examining teamwork and leadership in the fields of public

- administration, leadership, and management. *Team Performance Management,* 21(3/4), 199-216. doi:10.1108/TPM-07-2014-0037
- Choi, S. Y., Lee, H., & Yoo, Y. (2010). The impact of information technology and transactive memory systems on knowledge sharing, application and team performance: A field study. *MIS Quarterly*, *34*(4), 855-870. Retrieved from http://aisel.aisnet.org
- Christian, N. J. (2010). Leadership during times of crisis—The case for an organizational change management curriculum. *Proceedings of the Northeast Business and Economics Association*, 497-500. Retrieved from http://www.nbea.us
- Christian, J. S., Pearsall, M. J., Christian, M. S., & Ellis, A. P. J. (2014). Exploring the benefits and boundaries of transactive memory systems in adapting to team member loss. *Group Dynamics: Theory, Research, and Practice, 18*(1), 69-86. doi:10.1037/a0035161
- Chumley, C. K. (2013, October 14). Leon Panetta: Military readiness 'badly damaged' by sequester. Retrieved from http://www.washingtontimes.com/news/2013/oct/14/leon-panetta-military-readiness-badly-damaged-sequ/
- Clarke, N. (2012a). Leadership in projects: What we know from the literature and new insights. *Team Performance Management*, 18(3/4), 128-148. doi:10.1108/13527591211241042
- Clarke, N. (2012b). Shared leadership in projects: A matter of substance over style. *Team Performance Management, 18*(3/4), 196-209.

- doi:10.1108/13527591211241024
- Cole, M. S., Carter, M. Z., & Zhang, Z. (2013). Leader-member congruence in power distance values and team effectiveness: The mediating role of procedural justice climate. *Journal of Applied Psychology*, *98*(6), 962-973. doi:10.1037/a0034269
- Collins, C. G., & Parker, S. K. (2010). Team capability beliefs over time: Distinguishing between team potency, team outcome efficacy, and team process efficacy.

 Journal of Occupational and Organizational Psychology, 83, 1003-1023.

 doi:10.1348/096317909X482471
- Collins, D., & Cruickshank, A. (2015). Take a walk on the wild side: Exploring, identifying, and developing consultancy expertise with elite performance team leaders. *Psychology of Sport and Exercise*, *16*(1), 74-82. doi:10.1016/j.psychsport.2014.08.002
- Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and*procedures for developing grounded theory (4th ed.). Thousand Oaks, CA: Sage

 Publications, Inc.
- Cordery, J. L., & Soo, C. (2008). Overcoming impediments to virtual team effectiveness. (2008). *Human Factors and Ergonomics in Manufacturing*, 18(5), 487-500. doi:10.1002/hfm.20119
- Courtney, H. S., Navarro, E., & O'Hare, C. A. (2007). The dynamic organic transformational (D.O.T.) team model for high-performance knowledge-worker teams. *Team Performance Management*, *13*(1/2), 34-46. doi:10.1108/13527590710736716

- Crawford, E. R., & Lepine, J. A. (2013). A configural theory of team processes:

 Accounting for the structure of taskwork and teamwork. *Academy of Management Review*, 38(1), 32-48. doi:10.5465/amr.2011.0206
- Crawford, J., & Leonard, L. N. K. (2012). Predicting post-meeting work activity in software development projects. *Team Performance Management*, 18(1/2), 59-77. doi:10.1108/13527591211207716
- Creswell, J.W. (2012). *Qualitative inquiry and research design: Choosing among the five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Cronin, M. A., Weingart, L. R., & Todorova, G. (2011). Dynamics in groups: Are we there yet? *The Academy of Management Annals*, 5(1), 571-612. doi:10.1080/19416520.2011.590297
- Cross, R., Ehrlich, K., Dawson, R., & Helferich, J. (2008). Managing collaboration: Improving team effectiveness through a network perspective. *California Management Review*, 40(4), 74-97. Retrieved from http://cmr.berkeley.edu
- Cunningham, J. B., & Kempling, J. S. (2009). Implementing change in public sector organizations. *Management Decision*, 47(2), 330-344. doi:10.1108/00251740910938948
- Currie, G., & Procter, S. (2003). The interaction of human resource policies and practices with the implementation of teamworking: Evidence from the UK public sector. *International Journal of Human Resource Management, 14*(4), 581-599. Retrieved from http://www.tandfonline.com
- Curtis, S., & Wright, D. (2001). Retaining employees the fast track to commitment.

- Management Research News, 24(8/9), 56-60. Retrieved from http://www.emeraldinsight.com/loi/mrn
- Dalenberg, S., Vogelaar, A. L. W., & Beersma, B. (2009). The effect of a team strategy discussion on military performance. *Military Psychology*, 21(Suppl.2), S31-S46. doi:10.1080/089956000903249107
- Daspit, J., Tillman, C. J., Boyd, N. G., & McKee, V. (2013). Cross-functional team effectiveness: An examination of internal team environment, shared leadership, and cohesion influences. *Team Performance Management*, 19(1/2), 34-56. doi:10.1108/13527591311312088
- DeChurch, L. A., & Mesmer-Magnus, J. R. (2010a). Measuring shared team mental models: A meta-analysis. *American Psychological Association*, 14(1), 1-14. doi:10.1037/a0017455
- DeChurch, L. A., & Mesmer-Magnus, J. R. (2010b). The cognitive underpinnings of effective teamwork: A meta-analysis. *Journal of Applied Psychology*, 95(1), 32-53. doi:10.1037/a0017328
- Decuyper, S., Dochy, F., & Van den Bossche, P. (2010). Grasping the dynamic complexity of team learning: An integrative model for effective team learning in organisations [sic]. Educational Research Review, 5(2), 111-133. doi:10.1016/j.edurev.2010.02.002
- De Jong, B. A., & Elfring, T. (2010). How does trust affect the performance of ongoing teams? The mediating role of reflexivity, monitoring, and effort. *Academy of Management Journal*, *53*(3), 535-549. doi:10.5465/AMJ.2010.51468649

- Denholm, D., & Kangas, P. (2010, April 1). Multi-sector workforce collaboration:

 Sourcing for improved performance. *The Public Manager (2010, April)*, 31-37.

 Retrieved from https://www.td.org/Publications/Magazines/The-Public-Manager
- Denning, S. (2010). A leader's guide to radical management of continuous innovation.

 Strategy & Leadership, 38(4), 11-16. Retrieved from

 http://www.emeraldinsight.com/loi/sl
- DeOrtentiis, P. S., Summers, J. K., Ammeter, A. P., Douglas, C., & Ferris, G. R. (2013).

 Cohesion and satisfaction as mediators of the team trust team effectiveness relationship: An interdependence theory perspective. *Career Development International*, 18(5), 521-543. doi:10.1108/CDI-03-2013-0035
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The Sage handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Derksen, K., Caluwé, L. de, & Simons, R.-J. (2011). Developmental space for groups working on innovation. *Human Resource Development Review*, 14(3), 253-271. doi:10.1080/13678868.2011.585060
- Derksen, K., Caluwé, L. de, Rupert, J., & Simons, R.-J. (2014). Assessing developmental space in teams. *Team Performance Management*, 20(7/8), 277-293. doi:10.1108/TPM-03-2014-0022
- Dettman, K. L., Harty, M. J., & Lewin, J. (2010, Spring). Resolving megaproject claims:

 Lessons from Boston's "Big Dig." *The Construction Lawyer*, 30(2), 1-13.

 Retrieved from http://www.heinonline.org
- Deuja, A., Kohn, N. W., Paulus, P. B., & Korde, R. M. (2014). Taking a broad

- perspective before brainstorming. *Group Dynamics: Theory, Research, and Practice, 18*(3), 222-236. doi:10.1037/gdn000008
- De Waal, A.A. (2005). The foundations of nirvana: The characteristics of a high performance organization. Retrieved from http://www.andredewaal.nl
- De Waal, A. A. (2007). The characteristics of a high performance organization.

 *Business Strategy Series, 8(3), 179-185. doi:10.1108/17515630710684178
- De Waal, A.A. (2008). The secret of high performance organizations. *Management Online REview* [sic]. Retrieved from www.moreexpertise.com.
- De Waal, A. A. (2010). Achieving high performance in the public sector: What needs to be done? *Public Performance & Management Review, 34*(1), 81-103. doi:10.2753/PMR1530-9576340105
- De Waal, A., & Frijns, M. (2011). Longitudinal research into factors of high performance: The follow-up case of Nabil Bank. *Measuring Business Excellence*, 15(1), 4-19. doi:10.1108/13683041111113213
- Dietrich, P., Eskerod, P., Dalcher, D., Sandhawalia, B. (2010). The dynamics of collaboration in multipartner projects. *Project Management Journal*, 41(4), 59-78. doi:10.1002/pmj.20194
- Du, J., Choi, J. N., & Hashem, F. (2012). Interaction between one's own and others' procedural justice perceptions and citizenship behaviors in organizational teams:

 The moderating role of group identification. *Group Dynamics: Theory, Research, and Practice, 16*(4), 289-302. doi:10.1037/a0028524
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A

- meta-analysis of antecedents and consequences of leader-member exchange:

 Integrating the past with an eye toward the future. *Journal of Management*, *38*(6), 1715-1759. doi:10.1177/0149206311415280
- Dull, M. (2010). Leadership and organizational culture: Sustaining dialogue between practitioners and scholars. *Public Administration Review*, 70(6), 857-866. doi:10.1111/j.1540-6210.2010.02217.x
- Edmondson, A. C. (2011a). Strategies for learning from failure. *Harvard Business Review*, 89(4), 48-55. Retrieved from https://hbr.org
- Edmondson, A. C. (2011b). Teamwork on the fly: How to master the new art of teaming. *Harvard Business Review*, 90(4), 72-80. Retrieved from https://hbr.org
- Edmondson, A. C. (2012). *Teaming: How organizations learn, innovate, and compete in the knowledge economy.* San Francisco, CA: Josey-Bass.
- Eggensperger, J. D. (2004). How far is too far? Lessons for business from ultra-high-performing military teams. *Team Performance Management*, 10(3/4), 53-59. doi:10.1108/13527590410545045
- Ehie, I. C. (2010). The impact of conflict on manufacturing decision and company performance. *International Journal of Production Economics*, *126*, 145-157. doi:10.1016/j.ijpe.2010.02.015
- Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology, 2*, 335-362. Retrieved from http://www.annualreviews.org/journal/psych
- Emich, K. J. (2014). A social cognitive investigation of intragroup motivation:

 Transpersonal efficacy, effort allocation, and helping. *Group Dynamics: Theory*,

- Research, and Practice, 18(3), 203-221. doi:10.1037/gdn0000007
- Erkutlu, H. (2012). The impact of organizational culture on the relationship between shared leadership and team productivity. *Team Performance Management*, *18*(1/2), 102-119. doi:10.1108/13527591211207734
- Erwin, D. (2009). Changing organizational performance: Examining the change process.

 *Hospital Topics: Research and Perspectives on Healthcare, 87(3), 28-40.

 doi:10.3200/HTPS.87.3.28-40
- Erwin, D. G., & Garman, A. N. (2009). Resistance to organizational change: Linking research and practice. *Leadership & Organization Development Journal*, 31(1), 39-56. doi:10.1108/01437731011010371
- Fard, H. D., Ghatari, A. R., & Hasiri, A. (2010). Employees [sic]morale in public sector:

 Is organizational trust an important factor? European Journal of Scientific

 Research, 46(3), 378-390. Retrieved from

 http://www.europeanjournalofscientificresearch.com
- Fard, H. D., Rajabzadeh, A., & Hasiri, A. (2010). Organizational trust in public sector:

 Explaining the role of managers' managerial competency. *European Journal of Economics, Finance, and Administrative Services*, 25, 29-43. Retrieved from http://www.europeanjournalofeconomicsfinanceandadministrativesciences.com/is sues/EJEFAS 67.html
- Fausing, S., Jeppesen, H. J., Jønsson, T. S., Lewandowski, J., & Bligh, M. C. (2013).

 Moderators of shared leadership: Work function and team autonomy. *Team*Performance Management, 19(5/6), 244-262. doi:10.1108/TPM-11-2012-0038

- Ferguson, A. J., & Peterson, R. S. (2015). Sinking slowly: Diversity in propensity to trust predicts downward trust spirals in small groups. *Journal of Applied Psychology*, 100(4), 1012-1024. doi:10.1037/ap10000007
- Franck, E., Nuesch, S., & Pieper, J. (2011). Specific human capital as a source of superior team performance. *Schmalenbach Business Review*, *63*(4), 376-392. Retrieved from http://www.sbr-online.de
- Franz, T. M. (2012). *Group dynamics and team interventions: Understanding and improving team performance*. Chichester, West Sussex, England: Wiley-Blackwell.
- Frick, B., J., Goetzen, U., & Simmons, R. (2013). The hidden costs of high-performance work practices: Evidence from a large German steel company. *Industrial and Labor Relations Review*, 66(1), 198-224. Retrieved from http://www.ilr.cornell.edu/ilrreview/
- Frings, D., Hurst, J., Cleveland, C., Blacovich, J., & Abrams, D. (2012). Challenge, threat, and subjective group dynamics: Reactions to normative and deviant group members. *Group Dynamics: Theory, Research, and Practice, 16*(2), 105-121. doi:10.1037/a0027504
- Fruhen, L. S., & Keith, N. (2014). Team cohesion and error culture in risk work environments. *Safety Science*, *65*, 20-27. doi:10.1016/j.ssci.2013.12.011
- Fryer, J. (2012). Boston's "Big Dig" offers lessons in budgeting, management. Retrieved from http://www.hks.harvard.edu/centers/rappaport/events-and-news/audio-and-video-clips/boston%22s-%22big-dig%22-offers-lessons-in-budgeting,-

- management
- Fryer, K., Antony, J., & Ogden, S. (2009). Performance management in the public sector. *International Journal of Public Sector Management*, 22(6), 478-498. doi:10.1108/09513550910982850
- Gabris, G. T., & Nelson, K. L. (2013). Transforming municipal boards into accountable, high-performing teams: Towards a diagnostic model of governing board effectiveness. *Public Performance and Management Review*, *36*(3), 472-495. doi:10.2753/PMR1530-9576360305
- Gallegos, P. J., & Peeters, J. M. (2011). A measure of teamwork perceptions for teambased learning. *Currents in Pharmacy Teaching and Learning*, *3*(1), 30-35. doi:10.1016/j.cptl.2010.10.004
- Garbers, Y., & Konradt, U. (2014). The effect of financial incentives on performance: A quantitative review of individual and team-based financial incentives. *Journal of Occupational and Organizational Psychology*, 87(1), 102-137. doi:10.1111/joop.12039
- Gardner, H. K. (2012a). Coming through when it matters most: How great teams do their best work under pressure. *Harvard Business Review*, *90*(4), 82-91. Retrieved from https://hbr.org
- Gardner, H. K. (2012b). Performance pressure as a double-edged sword: Enhancing team motivation but undermining the use of team knowledge. *Administrative Science Quarterly*, *57*(1), 1-46. doi:10.1177/0001839212446454
- Garrett, S. K., Caldwell, B. S., Harris, E. C., & Gonzalez, M. C. (2009). Six dimensions

- of expertise: a more comprehensive definition of cognitive expertise for team coordination. *Theoretical Issues in Ergonomics Science*, 10(2), 93-105. doi:10.1080/14639220802059190
- Gates, R. M. (2009, March). A balanced strategy: Reprogramming the Pentagon for a new age. *The DISAM Journal of International Security Cooperation*Management (2009), 11-17. Retrieved from http://www.disam.dsca.mil
- Gates, R. M. (2010, February 23). *NATO strategic concept seminar (Future of NATO)*.

 Remarks as Delivered by Secretary of Defense Robert M. Gates, National

 Defense University, Washington, D.C., Tuesday, February 23, 2010. Retrieved from http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1423
- Gilman, M., & Raby, S. (2013). National context as a predictor of high-performance work system effectiveness in small-to-medium-sized enterprises (SMEs): A UK-French comparative analysis. *The International Journal of Human Resource Management*, 24(2), 372-390. doi:10.1080/09585192.2012.672447
- Gockel, C., & Kerr, N. L. (2015). Put-down humor directed at outgroup members increases perceived—but not experienced—cohesion in groups. *Humor*, 28(2), 205-288. doi:10.1515/humor-2015-0020
- Goodall, J. (2013). Recruit for attitude, train for skills: Creating high performing leadership teams. *Educational Management Administration & Leadership*, 41(2), 199-213. doi:10.1177/1741143212468350
- Gould-Williams, J. S., & Gatenby, M. (2010). The effects of organizational context and teamworking activities on performance outcomes: A study conducted in England

- local government. *Public Management Review, 12*(6), 759-787. doi:10.1080/14719037.2010.488862
- Guglielmi, C., Feldman, D. L., Marco, A. P., Graling, P., Hoppes, M., Asplin, L. L., &
 Groah, L. (2011). Defining competency in high-performance teams. *Association of periOperative Registered Nurses (AORN) Journal*, 93(5), 528-538.
 doi:10.1016/j.aorn.2011.03.004
- Gupta, N. (2012). Team responses to noncontributing members: The effects of attribution and knowledge overlap. *Group Dynamics: Theory, Research, and Practice, 16*(3), 172-188. doi:10.1037/a0029297
- Haas, M. R. (2010). The double-edged swords of autonomy and external knowledge:

 Analyzing team effectiveness in a multinational organization. *Academy of Management Journal*, *53*(5), 989-1008. doi:10.5465/AMJ.2010.54533180
- Hagemann, V., Kluge, A., & Ritzmann, S. (2012). Flexibility under complexity: Work contexts, task profiles and team processes of high responsibility teams. *Employee Relations*, *34*(3), 322-338. doi:10.1108/01425451211217734
- Hagel, C. (2013, July 31). Statement on strategic choices and management review.

 Retrieved from https://www.defense.gov/Speeches/Speech.aspx?SpeechID=1798
- Halfhill, T., Nielsen, T. M., Sundstrom, E., & Weilbaecher, A. (2005). Group personality composition and performance in military service teams. *Military Psychology*, 17(1), 41-54. doi:10.1207/s15327876mp1701 4
- Hauschildt, K., & Konradt, U. (2012). Self-leadership and team members' work role performance. *Journal of Managerial Psychology*, *27*(5), 497-517.

- doi:10.1108/02683941211235409
- Henttonen, K. (2010). Exploring social networks on the team level—A review of the empirical literature. *Journal of Engineering and Technology Management*, *27*, 74-109. doi:10.1016/j.jengtecman.2010.03.005
- Herbert, K., Mockaitis, A. I., & Zander, L. (2014). An opportunity for east and west to share leadership: A multicultural analysis of shared leadership preferences in global teams. *Asian Business and Management, 13*(3), 257-282. doi:10.1057/abm.2014.10
- Hertel, G. (2011). Synergetic effects in working teams. *Journal of Managerial Psychology*, 26(2), 176-184. doi:10.1108/02683941111112622
- Hollenbeck, J. R., Beersma, B., & Schouten, M. E. (2012). Beyond team types and taxonomies: A dimensional scaling conceptualization for team description. *Academy of Management Review, 32*(1), 82-106. doi:10.5465/amr.2010.0181
- Hollenbeck, J. R., Ellis, A. P. J., Humphrey, S. E., Garza, A. S., & Ilgen, D. R. (2011).
 Asymmetry in structural adaptation: The differential impact of centralizing versus decentralizing team decision-making structures. *Organizational Behavior and Human Decision Processes*, 114(1), 64-74. doi:10.1016/j.obhdp.2010.08.003
- Honts, C., Prewett, M., Rahael, J., & Grossenbacher, M. (2012). The importance of team processes for different team types. *Team Performance Management*, 18(5/6), 312-327. doi:10.1108/13527591211251104
- Hu, J., & Liden, R. C. (2011). Antecedents of team potency and team effectiveness: An examination of goal and process clarity and servant leadership. *Journal of*

- Applied Psychology, 96(4), 851-862. doi:10.1037/a0022465
- Hu, J., & Liden, R. C. (2015). Making a difference in the teamwork: Linking team prosocial motivation to team processes and effectiveness. *Academy of Management Journal*, 58(4), 1102–1127. doi:10.5465/amj.2012.1142
- Huberman, A. M., & Miles, M. B. (2002). *The qualitative researcher's companion*. Thousand Oaks, CA: Sage Publications.
- Humphrey, S. E., & Aime, F. (2014). Team microdynamics: Toward an organizing approach to teamwork. *The Academy of Management Annals*, 8(1), 443-503. doi:10.1080/19416520.2014.904140
- Iliano, C., & Wade, T. (2010, October 13). Chilean miners rescued after 69 days underground. *Reuters*. Retrieved from http://www.reuters.com/article/2010/10/13/us-chile-miners-idUSN0925972620101013
- Ingvaldsen, J. A., Johansen, T. S., & Aarlott, M. M. (2014). Emergent HPWS: Why

 HRM may not be needed to build a high-performance work system. *Team*Performance Management, 20(7/8), 294-306. doi:10.1108/TPM-03-2014-0021
- James, P. S. (2014). Aligning and propagating organizational values. *Procedia Economics and Finance*, 11, 95-109. doi:10.1016/S2212-567(14)00180-4
- Jiang, L., & Chen, J. (2011, Feb). How Chinese enterprises effectively establish selfmanagement teams. Asian Social Science, 7(2), 136-140. Retrieved from http://www.ccsenet.org/journal/index.php/ass
- Johnson, D. W., & Johnson, F. P. (2013). Joining together: Group theory and group

- skills. (11th ed.). Boston, MA: Pearson Education, Inc.
- Jones, E. E., & Lambertus, J. D. (2014). Expecting less from groups: A new perspective on shortcomings in idea generation groups. *Group Dynamics: Theory, Research,* and Practice, 18(3), 237-250. doi:10.1037/gdn000010
- Joy, A., & Haynes, B. P. (2011). Office design for the multi-generational knowledge workforce. *Journal of Corporate Real Estate*, 13(4), 216-232. doi:10.1108/14630011111214428
- Kane, A. A., & Rink, F. (2015). How newcomers influence group utilization of their knowledge: Integrating versus differentiating strategies. *Group Dynamics:* Theory, Research, and Practice, 19(2), 91-105. doi:10.1037/gdn0000024
- Katzenbach, J. R., & Smith, D. K. (1993). The discipline of teams: What makes the difference between a team that performs and one that doesn't? *Harvard Business Review*, 71(2), 111-120. Retrieved from https://hbr.org
- Katzenbach, J. R., & Smith, D. K. (2006). *The wisdom of teams*. (Reprint ed.). New York: HarperBusiness.
- Kenny, D. A., Gomes, S. B., & Kowal, C. (2015). The intergroup social relations model: ISRM. Group Dynamics: Theory, Research, and Practice, 19(3), 152-165. doi:10.1037/gdn0000028
- Kim, E., & Glomb, T. M. (2014). Victimization of high performers: The roles of envy and work group identification. *Journal of Applied Psychology*, 99(4), 619-634. doi:10.1037/a0035789
- Kirke, C. (2010). Military cohesion, culture and social psychology. Defense and

- Security Analysis, 26(2), 143-159. doi:10.1080/14751798.2010.488856
- Kivlighan, D. M. Jr., Li, X., & Gillis, L. (2015). Do I fit with my group? Withinmember and within-group fit with the group in engaged group climate and group members feeling involved and valued. *Group Dynamics: Theory, Research, and Practice, 19*(2), 106-121. doi:10.1037/gdn0000025
- Klein, K. J., Knight, A. P., Ziegert, J. C., Lim, B. C., & Saltz, J. L. (2011). When team members' values differ: The moderating role of team leadership. *Organizational Behavior and Human Decision Processes*, 114(1), 25-36.
 doi:10.1016/j.obhdp.2010.08.004
- Kleingeld, A., van Mierlo, H., & Arends, L. (2011). The effect of goal setting on group performance: A meta-analysis. *Journal of Applied Psychology*, *96*(6), 1289-1304. doi:10.1037/a0024315
- Knight, A. P., & Eisenkraft, N. (2015). Positive is usually good, negative is not always bad: The effects of group affect on social integration and task performance.

 **Journal of Applied Psychology, 100(4), 1214-1227. doi:10.1037/ap10000006
- Kozlowski, S. W. J., & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. *Psychological Science in the Public Interest*, 7(3), 77-124. Retrieved from http://psi.sagepub.com
- Koudenburg, N., Postmes, T., Gordijn, E. H., & Broekman, A. V. M. (2015). Uniform and complementary social interaction: Distinct pathways to solidarity. *PLoS ONE*, *10*(6), 1-29. doi:10.1371/journal.pone.0129061
- Körner, M., Wirtz, M. A., & Göritz, A. S. (2015). Relationship of organizational culture,

- teamwork and job satisfaction in interprofessional teams. *BMC Health Services Research*, *15*(243), 1-12. doi:10.1186/s12913-015-0888-y
- Kuruppuarachchi, P. R. (2009). Virtual team concepts in projects: A case study. *Project Management Journal*, 40(2), 19-33. doi:10.1002/pmj.20110
- Lam, C. E., Van der Vegt, G. S., Walter, F., & Huang, X. (2011). Harming high performers: A social comparison perspective on interpersonal harming in work teams. *Journal of Applied Psychology*, *96*(3), 588-601. doi:10.1037/a0021882
- Leach, L. S., & Mayo, A. M. (2013). Rapid response teams: Qualitative analysis of their effectiveness. *American Journal of Critical Care*, 22(3), 198-210). Retrieved from http://ajcc.aacnjournals.org
- Lee, C., Farh, J. L., & Chen, Z. J. (2011). Promoting group potency in project teams: The importance of group identification. *Journal of Organizational Behavior*, 32(8), 1147-1162. doi:10.11002/job.741
- Lee, C.-C., Lin, Y.-H., Huan, H.-C., Huang, W.-W., & Teng, H.-H. (2015). The effects of task interdependence, team cooperation, and team conflict on team performance. *Social Behavior and Personality*, *43*(4), 529-536. doi:10.2224/sbp.2015.43.4.529
- Lehmann-Willenbrock, N., Allen, J. A., & Meinecke, A. L. (2014). Observing culture:

 Differences in U.S.-American and German team meeting behaviors. *Group Processes & Intergroup Relations*, 17(2), 252-721.

 doi:10..1177/1368430213497066
- Leicht, C., Crisp, R. J., & de Moura, G. R. (2013). Need for structure predicts leadership

- preference. *Group Dynamics: Theory, Research, and Practice, 17*(1), 53-66. doi:10.1037/a0031476
- Leo, F. M., González-Ponce, I., Sánchez-Oliva, D., Pulido, J. J., & García-Calvo, T. (2015). Adaptation and validation in Spanish of the group environment questionnaire (GEQ) with professional football players. *Psicothema*, 27(3), 261-268. doi:10.7334/psicothema2014.247
- LePine, J. A., Buckman, B. R., Crawford, E. R., & Methot, J. R. (2011). A review of research on personality in teams: Accounting for pathways spanning levels of theory and analysis. *Human Resource Management Review*, *21*(4), 311-330. doi:10.1016/j.hrmr.2010.10.004
- Lewin, K. (1943). Psychology and the process of group living. *Journal of Social Psychology*, 17(1), 113-131. doi:16878089
- Lewin, K. (1944a). The dynamics of group action. *Educational Leadership*, *I*(4), 195-200. doi: 21476988
- Lewin, K. (1944b). A research approach to leadership problems. *Journal of Educational Sociology*, *3*(1), 392-398. doi:edsjsr.10.2307.2262546
- Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*, *2*(4), 34-46. Retrieved from: http://bscw.wineme.fb5.uni-slegen.de
- Li, N., Zhao, H. H., Walter, S. L., Zhang, X. A., & Yu, J. (2015). Achieving more with less: Extra milers' behavioral influences in teams. *Journal of Applied Psychology*, 100(4), 1025-1039. doi:10.1037/ap10000010
- Linden, R. (2010). Collaborative intelligence. *The Public Manager*, 39, 20-26.

- Retrieved from https://www.td.org/Publications/Magazines/The-Public-Manager
- Lira, E. M., Ripoll, P., Peiro, J. M., & Gonzalez, P. (2006). The roles of group potency and information and communication technologies in the relationship between task conflict and team effectiveness: A longitudinal study. *Computers in Human Behavior*, 23, 2888-2903. doi:10.1016/j.chb.2006.06.004
- Lo Coco, G., Gullo, S., Lo Verso, G., & Kivlighan, D. M. Jr. (2013). Sex composition and group climate: A group actor-partner interdependence analysis. *Group Dynamics: Theory, Research, and Practice, 17*(4), 270-280. doi:10.1037/a0034112
- London, M. (2014). Team processes for adaptive and innovative outcomes. *Team Performance Management*, 20(1/2), 19-38. doi:10.1108/TPM-05-2013-0012
- Lourenço, P. R., Dimas, I. D., & Rebelo, T. (2014). Effective workgroups: The role of diversity and culture. *Journal of Work and Organizational Psychology*, *30*(3), 123-132. doi:10.1016/j.rpto.2014.11.002
- Macqueen, A. (2011, Saturday 16). Los 33: Chilean miners face up to a strange new world. *The Observer*. Retrieved from http://www.theguardian.com/world/2011/jul/17/chilean-miners-one-year-on
- Marin-Garcia, J. A., & Poveda, Y. B. (2010). The implementation of a continuous improvement project at a Spanish marketing company: A case study.

 *International Journal of Management, 27(3), 593-606. Retrieved from http://www.theijm.com
- Marques-Quinteiro, P., Curral, L., Passos, A. M., & Lewis, K. (2013). And now what do

- we do? The role of transactive memory systems and task coordination in action teams. *Group Dynamics: Theory, Research, and Practice, 17*(3), 194-206. doi:10.1037/a0033304
- Marsh, F. K. (2010). High performance team: Building a business program with partand full-time faculty. *Journal of Education for Business*, 85(4), 187-194. doi:10.1080/08832320903252421
- Martínez-Moreno, E., Zornoza, A., González-Navarro, P., & Thompson, L. F. (2012).

 Investigating face-to-face and virtual teamwork over time: When does early task conflict trigger relationship conflict? *Group Dynamics: Theory, Research, and Practice, 16*(3), 159-171. doi:10.1037/a0029569
- Maruping, L. M., & Magni, M. (2015). Motivating employees to explore collaboration technology in team contexts. *Management Information Systems Quarterly*, *39*(1), 1-16. Retrieved from: http://www.misq.org
- Mathieu, J. E., Kukenberger, M. R., D'Innocenzo, L., & Reilly, G. (2015). Modeling reciprocal team cohesion-performance relationships, as impacted by shared leadership and members' competence. *Journal of Applied Psychology, 100*(3), 713-734. doi:10.1037/a0038898
- Mathieu, J. E., Tannenbaum, S. I., Donsbach, J. S., & Alliger, G. M. (2014). A review and integration of team composition models: Moving toward a dynamic and temporal framework. *Journal of Management*, 40(1), 130-160. doi:10.1177/0149206313503014
- Maxwell, J. A. (2012). *Qualitative research design: An interactive approach* (3rd ed.).

- Thousand Oaks, CA: Sage Publications, Inc.
- Mayer, B. W., & Dale, K. (2010). The impact of group cognitive complexity on group satisfaction: A person-environment fit perspective. *Journal of Behavioral and Applied Management, 12*(1), 24-47. Retrieved from http://www.ibam.com/pubs/jbam/
- Maynard, M. T., Mathieu, J. E., Gilson, L. L., O'Boyle Jr., E. H., & Cigularov, K. P. (2013). Drivers and outcomes of team psychological empowerment: A meta-analytic review and model test. *Organizational Psychology Review, 3*(2), 101-137. doi:10.1177/2041386612456868
- McAlearney, A. S., Garman, A. N., Song, P. H., McHugh, M., Robbins, J., & Harrison,
 M. I. (2011). High-performance work systems in health care management, Part 2:
 Qualitative evidence from five case studies. *Health Care Management Review*,
 36(3), 214-226. doi:10.1097/HMR.0b013e3182100dc4
- McNabb, D. E. (2008). Research methods in public administration and nonprofit management: Quantitative and qualitative approaches (2nd ed.). Armonk, NY: M. E. Sharpe.
- McPherson, S., & Parks, C. D. (2011). Intergroup and interindividual resource competition escalating into conflict: The elimination option. *Group Dynamics: Theory, Research, and Practice, 15*(4), 285-296. doi:10.1037/a0024938
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Josey-Bass.
- Mesiec, N., & Graff, D. (2015). Being open matters: The antecedents and consequences

- of cross-understanding in teams. *Team Performance Management*, 21(1/2), 6-18. doi:10.1108/TPM-10-2014-0055
- Mesmer-Magnus, J. R., DeChurch, L. A., Jimenez-Rodriguez, M., Wildman, J., & Shuffler, M. (2011). A meta-analytic investigation of virtuality and information sharing in teams. *Organizational Behavior and Human Decision Processes*, 115(2), 214-225. doi:10.1016/j.obhdp.2011.03.002
- Meyer, C. J. (2013). A new perspective on coalitions: What motivates membership? *Group Dynamics: Theory, Research, and Practice, 17*(2), 124-136. doi:10.1037/a0031346
- Miles, J. R., & Kivlighan, D. M. Jr. (2012). Perceptions of group climate by social identity group in intergroup dialogue. *Group Dynamics: Theory, Research, and Practice*, *16*(3), 189-205. doi:10.1037/a0028634
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook.* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Mohammed, S., Ferzandi, L., & Hamilton, K. (2010). Metaphor no more: A 15-year review of the team mental model construct. *Journal of Management*, *36*(4), 876-910. doi:10.1177/0149206309356804
- Moldjord, C., & Iversen, A. (2015). Developing vulnerability trust in temporary high performance teams. *Team Performance Management*, 21(5/6), 231-246. doi:10.1108/TPM-08-2014-0050
- Molleman, E., & Broekhuis, M. (2012). How working in cross-functional teams relates to core attributes of professional occupations and the moderating role of

- personality. *Group Dynamics: Theory, Research, and Practice, 16*(1), 50-67. doi:10.1037/a0026408
- Monroe, B., Hornick, E., McFadden, K., Roegiers, B., & Anderson, R. (2011, May 7).

 18 famous, and infamous, missions. Retrieved from

 http://www.cnn.com/2011/POLITICS/05/06/special.ops/
- Moore, A., & Mamiseishvili, K. (2012). Examining the relationship between emotional intelligence and group cohesion. *Journal of Education for Business*, 87(5), 296-302. doi:10.1080/08832323.2011.623197
- Morier, D., Bryan, A. E. B., & Kasdin, L. (2013). The effects of group identity, group choice, and strength of group identification on intergroup sensitivity. *Group Dynamics: Theory, Research, and Practice: 17*(1), 14-29. doi:10.1037/a0030190
- Morita, P. P., & Burns, C. M. (2014). Trust tokens in team development. *Team*Performance Management, 20(1/2), 39-64. doi:10.1108/TPM-03-2013-0006
- Morris, L. E., & Williams, C. R. (2012). A behavioral framework for highly effective technical executives. *Team Performance Management*, 18(3/4), 210-230. doi:10.1108/13527591211241033
- Mueller, J. (2014). A special knowledge culture: Cultural antecedents for knowledge sharing between project teams. *European Management Journal*, *32*(2), 290-202. doi:10.1016/j.emj.2013.05.006
- Narayan, A., & Steele-Johnson, D. (2012). Individual and relational self-concepts in a team concept: Effects on task, perceptions, trust, intrinsic motivation, and satisfaction. *Team Performance Management*, 18(5/6), 236-255.

- doi:10.1108/13527591211251122
- Naranjo-Gil, D. (2015). The role of top management teams in hospitals facing strategic change: Effects on performance. *International Journal of Healthcare*Management, 8(1), 34-41. doi:10.1179/204791914Y.0000000078
- Nartisa, I., Putans, R., & Muravska, T. (2012). Strategic planning and management in public and private sector organizations in Europe: Comparative analysis and opportunities for improvement. *European Integration Studies*, *6*, 240-248. doi:10.5755/j01.eis.0.6.1538
- National Commission on Terrorist Attacks Upon the United States, The (2004). *The 9/11 Commission report*. Retrieved from http://govinfo.library.unt.edu/911/report/index.htm
- Nelson, B. (2010). Creating high-performing teams: Characteristics of an effective team and team recognition tips. *Healthcare Registration*, *19*(9), 10-12. Retrieved from http://www.ebscohost.com/academic/business-source-premier
- Newcomb, T. M. (1950). Role behaviors in the study of individual personality and of groups. *Journal of Personality*, 18(3), 273-289. doi:10.1111/1467-6494.ep8928527
- Newcomb, T. A. (1953). Social psychology and group processes. *Annual Review of Psychology*, 4(1), 183-214. doi:11290576.
- New low in approval for own House members: Post-ABC poll July 30 Aug 3. (2014, August 5). *The Washington Post*. Retrieved from http://www.washingtonpost.com/page/2010-

- 2019/WashingtonPost/2014/08/05/National-Politics/Polling/release 359.xml?uuid=qO3ylByPEeSbbBLjDL6Gow
- Nihalani, P. K., Wilson, H. E., Thomas, G., & Robinson, D. H. (2010). What determines high- and low-performing groups? The superstar effect. *Journal of Advanced Academics*, 21(3), 500-529. doi:10.1177/1932202X1002100306
- Nissen, H. A., Evald, M. R., & Clarke, A. H. (2014). Knowledge sharing in heterogeneous teams through collaboration and cooperation: Exemplified through public-private innovation partnerships. *Industrial Marketing Management*, 43(3), 437-482. doi:10.1016/j.indmarman.2013.12.015
- Noe, R. A., Dachner, A. M., Saxton, B., & Keeton, K. E. (2011). Team training for long-duration missions in isolated and confined environments: A literature review, an operational assessment, and recommendations for practice and research.

 NASA/TM-2011-216162. Retrieved from http://www.sti.nasa.gov
- Nohe, C., Michaelis, B., Menges, J., Zhang, Z., & Sonntag, K. (2013). Charisma and organizational change: A multilevel study of perceived charisma, commitment to change, and team performance. *The Leadership Quarterly*, 24(2), 378-389. doi:10.1016/j.leaqua.2013.02.001
- Oertel, R., & Antoni, C. H. (2014). Reflective team learning: Linking interfering events and team adaptation. *Team Performance Management*, 20(7/8), 328-342. doi:10.1108/TPM-03/2014-0027
- Office of Management and Budget (OMB), Executive Office of the President of the United States of America (2013). Fiscal year 2014 analytical perspectives:

- Budget of the U.S. government. Retrieved from http://www.whitehouse.gov/sites/default/files/omb/budget/fy2014/assets/spec.pdf
- Olson, J., & Olson, L. (2012). Virtual team trust: Task, communication and sequence.

 *Team Performance Management, 18(5/6), 256-276.

 doi:10.1108/13527591211251131
- O'Neill, T. A., & Allen, N. J. (2014). Team task conflict resolution: An examination of its linkages to team personality composition and team effectiveness outcomes.

 Group Dynamics: Theory, Research, and Practice, 18(2), 159-173.

 doi:10.1037/gdn0000004
- O'Neill, T. A., Allen, N. J., & Hastings, S. E. (2013). Examining the "pros" and "cons" of team conflict: A team-level meta-analysis of task, relationship, and process conflict. *Human Performance*, 26(3), 236-260. doi:10.1080/08959285.2013.795573
- Opute, A. P. (2012). Maximizing effectiveness in team sports: The personal audit tool.

 *Team Performance Management, 18(1/2), 78-101.

 doi:10.1108/1352759121207725
- Opute, A. P. (2014). Cross-functional bridge in dyadic relationship: Conflict management and performance implications. *Team Performance Management*, 20(3/4), 121-147. doi:10.1108/TPM-06-2013-0019
- Ortiz de Guinea, A., Webster, J., & Staples, D. S. (2012). A meta-analysis of the consequences of virtualness on team functioning. *Information and Management,* 49(6), 301-308. doi:10.1016/j.im.2012.08.003

- Osborn, R. N., & Marion, R. (2009). Contextual leadership, transformational leadership and the performance of international innovation seeking alliances. *The Leadership Quarterly*, 20(2), 191-206. doi:10.1016/j.leaqua.2009.01.010
- Osborn, R. N., Hunt, J. G., & Jauch, L. R. (2002). Toward a contextual theory of leadership. *The Leadership Quarterly*, *13*(6), 797-837. doi:10.1016/S1048-9843(02)00154-6
- Ozeki, M. (2015). Group-level group identity as a basis of a group. *Group Dynamics: Theory, Research, and Practice, 19*(3), 166-180. doi:10.1037/gdn0000030
- Paletz, S. B. F., Miron-Spektor, E., & Lin, C.-C. (2014). A cultural lens on interpersonal conflict and creativity in multicultural environments. *Psychology of Aesthetics, Creativity, and the Arts*, 8(2), 237-252. doi:10.1037/a0035927
- Pan, L., & Wang, Z. M. (2010). Knowledge transfer via personnel mobility: The effect of knowledge about the distribution of information. *Social Behavior and Personality*, 38(10), 1391-1400. doi:10.2224/sbp.2010.38.10.1391
- Patrick, B. A., & French, P. E. (2011). Assessing New Public Management's focus on performance measurement in the public sector. *Public Performance & Management Review*, *35*(2), 340-369. doi:10.2753/PMR1530-9576350205
- Patton, M. Q. (2015). *Qualitative research and evaluation methods: Integrating theory and practice* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Pazos, P. (2012). Conflict management and effectiveness in virtual teams. *Team**Performance Management, 18(7/8), 401-417. doi:10.1108.13527591211281138

 *Pellerin, C. (2015, October 14). Carter: Unstable budget harms defense capabilities,

- innovation. *DoD News, Defense Media Activity*. Retrieved from: http://www.defense.gov/News-Article-View/Article/623100
- Pentland, A. (2012). The new science of building great teams. *Harvard Business*Review, 90(4), 61-70. Retrieved from https://hbr.org
- Perry, E. E. Jr., Karney, D. F., & Spencer, D. G. (2013). Team establishment of self-managed work teams: A model from the field. *Team Performance Management*, 19(1/2), 87-108. doi:10.1108/13527591311312114
- Petitta, L., Jiang, L, & Palange, M. (2015). The differential mediating roles of task, relations, and emotions collective efficacy on the link between dominance and performance: A multilevel study in sports teams. *Group Dynamics: Theory, Research, and Practice, 19*(3), 181-199. doi:10.1037/gdn0000031
- Pierro, A., Sheveland, A., Livi, S., & Kruglanski, A. W. (2015). Person-group fit on the need for cognitive closure as a predictor of job performance, and the mediating role of group identification. *Group Dynamics: Theory, Research, and Practice,* 19(2), 77-90. doi:10.1037/gdn0000022
- Piotrowski, S. J., & Ansah, E. (2010). Organizational assessment tools: Report cards and scorecards of the federal agencies. *Public Affairs Quarterly, 34*(1) 109-142.

 Retrieved from http://paq.press.illinois.edu
- Pluut, H., Flestea, A. M., & Curşeu, P. L. (2014). Multiple team membership: A demand or resource for employees? *Group Dynamics: Theory, Research, and Practice,* 18(4), 333-348. doi:10.1037/gdn0000016
- Podsakoff, N. P., Maynes, T. D., Whitting, S. W., & Podsakoff, P. M. (2015). One

- (rating) from many (observations): Factors affecting the individual assessment of voice behavior in groups. *Journal of Applied Psychology*, *100*(4), 1189-1202. doi:10.1037/a0038479
- Poepsel, D. L., & Schroeder, D. A. (2013). Joining groups: How resources are to be divided matters. *Group Dynamics: Theory, Research, and Practice*, 17(3), 180-193. doi:10.1037/a0033846
- Poepsel, D. L., Schroeder, D. A., Harris, C. J., & Liu, Y. (2013). Can protections promote intergroup cooperation after they have been removed? *Group Dynamics: Theory, Research, and Practice, 17*(3), 162-179. doi:10.1037/a0033002
- Quader, M. S., & Quader, M. R. (2009). A critical analysis of high performing teams: A case study based on the British Telecommunication (BT) PLC. *Journal of Services Research*, 8(2), 175-216. Retrieved from http://www.jsr-iimt.in
- Quisenberry, W., & Burrell, D. N. (2012). Establishing a cycle of success by utilizing transactional leadership, technology, trust, and relationship building on high performing self-managed virtual teams. *Review of Management Innovation and Creativity*, *5*(16), 97-118. Retrieved from http://www.intellectbase.org/RMIC.php
- Rank, O. N., & Tuschke, A. (2010). Perceived influence and friendship as antecedents of cooperation in top management teams: A network approach. *Business Research*, 3(2), 151-171. Retrieved from http://link.springer.com/journal/40685/3/2
- Rashid, F., Edmondson, A.C., & Leonard, H.B. (2013, July/August). Leadership lessons from the Chilean mine rescue: A diverse—and initially disorganized—team

- demonstrated how to innovate and execute at the same time. *Harvard Business Review*, 91(7-8), 113-119. Retrieved from https://hbr.org
- Ray, D., & Bronstein, H. (1995). *Teaming up: Making the transition to a self-directed, team-based organization*. New York, NY: McGraw-Hill, Inc.
- Rego, A., Reis, D. Jr., & Cunha, A. P. E. (2015). Authentic leaders promoting store performance: The mediating roles of virtuousness and potency. *Journal of Business Ethics*, 128(3), 617-634. doi:10.1007/s10551-014-2125-8
- Rentsch, J., R., Delise, L. A., Mello, A. L., & Staniewicz, M. J. (2014). The integrative team knowledge building training strategy in distributed problem-solving teams. *Small Group Research*, 1-24. doi:10.1177/1046496414537690.
- Rentsch, J. R., Delise, L. A., Salas, E., & Letsky, M. P. (2010). Facilitating knowledge building in teams: Can a new team training strategy help? *Small Group Research*, *4*(5), 505-523. doi:10.1177/1046496410369563
- Ricketts, M., & Willis, J. (2010). High performing transient teams in organizations:

 Integrating AI and experiential learning. *AI Practitioner*, 12(4), 38-43. Retrieved from http://www.aipractitioner.com
- Rodriguez, R. P., & Hechanova, R. M. (2014). A study of culture dimensions, organizational ambidexterity, and perceived innovation in teams. *Journal of Technology Management & Innovation*, *9*(3), 21-33. doi:10.4067/S0718-27242014000300002
- Rolfsen, M. (2013). "We put teamwork back on the agenda again and again." The role of support systems in autonomous teamwork. *Team Performance Management*,

- 19(5/6), 292-304. doi:10.1108/TPM-12-2012-0045
- Rosen, M. A., Weaver, S. J., Lazzara, E. H., Salas, E., Wu, T., Silvestri, S., Schiebel, N., ... King, H.B. (2010). *Journal of Emergencies, Trauma, and Shock, 3*(4), 353-359. doi:10.4103/0974-2700.70746
- Rosh, L., Offermann, L. R., & Diest, R. V. (2012). Too close for comfort?

 Distinguishing between team intimacy and team cohesion. *Human Resource Management Review*, 22(2), 116-127. doi:10.1016/j.hrmr.2011.11.004
- Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). *Evaluation: A Systematic Approach (7*th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Rousseau, V., & Aubé, C. (2010). Team self-managing behaviors and team effectiveness: The moderating effect of task routineness. *Group and Organization Management*, 35(6), 751-781. doi:10.1177/1059601110390835
- Roulston, K. (2010). *Reflective interviewing: A guide to theory and practice*. Thousand Oaks, CA: Sage Publications, Inc.
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Rutti, R. M., Ramsey, J. R., & Li, C. (2012). The role of other orientation in team selection and anticipated performance. *Team Performance Management*, 18(1/2), 41-58. doi:10.1108/13527591211207707
- Salahuddin, M. M. (2010). Generational differences impact on leadership style and organizational success. *Journal of Diversity Management*, *5*(2), 1-6. Retrieved from http://www.cluteinstitute.com/journals/journal-of-diversity-management-

jdm/

- Saldaña, J. (2013). *The coding manual for qualitative researchers*. (2nd ed.) Thousand Oaks, CA: Sage Publications, Inc.
- Santos, C. M., & Passos, A. M. (2013). Team mental models, relationship conflict and effectiveness over time. *Team Performance Management*, *19*(7/8), 363-395. doi:10.1108/TPM-01-2013-0003
- Sayer, A. (2010). *Method in social science: Revised 2nd ed.* (2nd ed.). NY, NY: Routledge.
- Schillemans, T. (2013). Moving beyond the clash of interests: On stewardship theory and the relationships between central government departments and public agencies.

 Public Management Review, 15(4), 541-562.

 doi:10.1080/14719037.2012.691008
- Schneid, M., Isidor, R., Li, C., & Kabst, R. (2014). The influence of cultural context on the relationship between gender diversity and team performance: A meta-analysis.

 The International Journal of Human Resource Management, 26(6), 733-756.

 doi:10.1080/09585192.2014.957712
- Schreurs, B., van Emmerik, H., Van den Broeck, A., & Guenter, H. (2014). Work values and work engagement within teams: The mediating role of need satisfaction.

 Group Dynamics: Theory, Research, and Practice, 18(4), 267-281.

 doi:10.1037/gdn0000009
- Schwandt, T. A. (2015). *The SAGE dictionary of qualitative inquiry* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.

- Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: A meta-analytic review. *Journal of Applied Psychology*, 96(5), 981-1003. doi:10.1037/a0022676
- Seppälä, T., Lipponen, J., & Pirttilä-Backman, A.-M. (2012). Leader fairness and employees' trust in coworkers: The moderating role of leader group prototypicality. *Group Dynamics: Theory, Research, and Practice, 16*(1), 35-49. doi:10.1037/a0026970
- Shafritz, J. M., & Hyde, A. C. (2012). *Classics of public administration* (7th ed.). Boston, MA: Wadsworth.
- Shafritz, J.M., Ott, J.S., & Jang, Y.S. (2011). *Classics of organization theory* (7th ed.). Boston, MA: Wadsworth.
- Shaw, J. D., Zhu, J., Duffy, M. K., Scott, K. L., Shih, H. A., & Susanto, E. (2011). A contingency model of conflict and team effectiveness. *Journal of Applied Psychology*, 96(2), 391-400. doi:10.1037/a0021340
- Sheng, C. W., Tian, Y. F., & Chen, M. C. (2010). Relationships among teamwork behavior, trust, perceived team support, and team commitment. *Social Behavior and Personality*, 38(10), 1297-1305. doi:10.2224/sbp.2010.38.10.1297
- Sherif, M. (1949). The problem of inconsistency in intergroup relations. *Journal of Social Issues*, 5(3), 32-37. doi:10.1111/j.1540-4560.1949.tb02376.x
- Sherif, M. (1958). Superordinate goals in the reduction of intergroup conflict. *The American Journal of Sociology, 63*(4), 349-356. Retrieved from http://www.journals.uchicago.edu/toc/ajs/current

- Siebold, G. L. (2011). Key questions and challenges to the standard model of military group cohesion. *Armed Forces & Society*, *37*(3), 448-468. doi:10.1177/0095327X11398451
- Sierra, V., Andres, A., Solanas, A., & Leiva, D. (2010). Agreement in interpersonal perception as a predictor of group performance. *Psicothema*, 22(4), 848-857. Retrieved from http://www.psicothema.com/english/psicothema.asp?ID=3811
- Sisk, R. (2015). Reductions forced Army to cut 40,000 troops. *Military.com*. Retrieved from http://m.military.com/daily-news/2015/07/10/carter-says-budget-reductions-forced-army-to-cut-40000-troops.html
- Slotter, E. B., Winger, L., & Soto, N. (2015). Lost without each other: The influence of group identity loss on the self-concept. *Group Dynamics: Theory, Research, and Practice, 19*(1), 15-30. doi:10.1037/gdn0000020
- Solis, F., Sinfield, J. V., & Abraham, D. M. (2013). Hybrid approach to the study of inter-organization high performance teams. ASCE Journal of Construction Engineering and Management, 139(4), 379-392. doi:10.1061/(ASCE)CO.1943-7862.0000589
- Spink, K. S., Ulvick, J. D., McLaren, C. D., Crozier, A. J., & Fesser, K. (2015, November). Effects of groupness and cohesion on intention to return in sport.
 Sport, Exercise, and Performance Psychology, 4(4), 293-302.
 doi:10.1037/spy0000043
- Spink, K. S., Wilson, K. S., Brawley, L. R., & Odnokon, P. (2013). The perception of team environment: The relationship between the psychological climate and

- members' perceived effort in high-performance groups. *Group Dynamics: Theory, Research, and Practice, 17*(3), 150-161. doi:10.1037/a0033552
- Srivastava, M., Rogers, H., & Lettice, F. (2013). Team performance management: Past, current and future trends. *Team Performance Management*, 19(7/8), 352-362. doi:10.1108/TPM-04-2013-0009
- Stark, E., Bierly, P., & Harper, S. R. (2014). The interactive influences of conflict, task interdependence and cooperation on perceptions of virtualness in co-located teams. *Team Performance Management*, 20(5/6), 221-241. doi:10.1108/TPM-06-2013-0020
- Steinhauser, P. (2014, August 8). CNN poll: Trust in government at all-time low.

 Retrieved from http://politicalticker.blogs.cnn.com/2014/08/08/cnn-poll-trust-in-government-at-all-time-low-2/
- Stipicevic, S. (2013, October 14). New study measures the high cost of crisis-driven government. Retrieved from http://pgpf.org/press/2013/10/New-Study-Measures-the-High-Cost-of-Crisis-Driven-Government
- Strating, M. H., & Nieboer, A. P. (2012). Explaining variation in perceived team effectiveness: Results from eleven quality improvement collaboratives. *Journal of Clinical Nursing*, *22*(11-12), 1692-1706. doi:10.1111/j.1365-2702.2012.04120.x
- Summers, J. K., Humphrey, S. E., & Ferris, G. R. (2012). Team member change, flux in coordination, and performance: Effects of strategic core roles, information transfer, and cognitive ability. *Academy of Management Journal*, *55*(2), 314-338.

- doi:10.5465/amj.2010.0175
- Sung, S. Y., Choi, J. N., & Kim-Jo, T. (2014). Personality dissimilarity and work-related outcomes: Asymmetric effects and moderating role of group tenure. *Group Dynamics: Theory, Research, and Practice, 18*(1), 1-19. doi:10.1037/a0034411
- Tannenbaum, S. I., Mathieu, J. E., Salas, E., & Cohen, D. (2012). Teams are changing:

 Are research and practice evolving fast enough? *Industrial and Organizational*Psychology, 5(1), 2-24. doi:10.1111/j.1754-9434.2011.01396.x
- Täuber, S., & Sassenberg, K. (2012). The impact of identification on adherence to group norms in team sports: Who is going the extra mile? *Group Dynamics: Theory, Research, and Practice, 16*(4), 231-240. doi:10.1037/a0028377
- Theater/theatre [sic] (n.d.). In Cambridge's online English dictionary and thesaurus.

 Retrieved from http://dictionary.cambridge.org/dictionary/english/theatre
- Tiejun, W., Wenjun, W., Xin, B., & Dianzhi, L. (2013). Mediating effect of team trust between team conflict and team effectiveness in self-management teams. *Journal of Applied Sciences*, *13*(9), 1504-1508. doi:10.3923/jas.2013.1504.1508
- Townsend, F. F. (2006). The federal response to Hurricane Katrina: Lessons learned.

 Retrieved from http://library.stmarytx.edu/acadlib/edocs/katrinawh.pdf
- Trochim, W. M. K., & Donnelly, J. P. (2008). *The research methods knowledge base* (3rd ed.). Mason, OH: Centage Learning.
- Tröster, C., Mehra, A., & van Knippenberg, D. (2014). Structuring for team success:

 The interactive effects of network structure and cultural diversity on team potency and performance. *Organizational Behavior and Human Decision Processes*,

- 124(2), 245-255. doi:10.1016/j.obhdp.2014.04.003
- Tseng, H. W., & Yeh, H. T. (2013). Team members' perceptions of online teamwork learning experiences and building teamwork trust: A qualitative study.

 *Computers and Education, 63, 1-9. doi:10.1016/j.compedu.2012.11.013
- Tuuli, M. M., & Rowlinson, S. (2009). Empowerment in project teams: A multilevel examination of the job performance implications. *Construction Management and Economics*, 27(5), 473-498. doi:10.1080/01446190902729713
- Tuuli, M. M., Rowlinson, S., Fellows, R., & Liu, A. M. M. (2012). Empowering the project team: Impact of leadership style and team context. *Team Performance Management*, 18(3/4), 149-175. doi:10.1108/13527591211241006
- Uhl-Bien, M., & Marion, R. (2009). Complexity leadership in bureaucratic forms of organizing: A meso model. *The Leadership Quarterly*, 20, 631-650. doi:10.1016/j.leaqua.2009.04.007
- United States., & Curtis E. LeMay Center for Doctrine Development and Education (2013). Air Force doctrine: VOL III: Command, Annex 3-0: Operations, 5 June 2013. Retrieved from: https://doctrine.af.mil
- Van der Haar, S., Li, J., Segers, M., Jehn, K. A., & Van den Bossche, P. (2014).
 Evolving team cognition: The impact of team situation models on team
 effectiveness. European Journal of Work and Organizational Psychology, 1-15.
 doi:10.1080/1359432X.2014.942731
- Van Knippenberg, D., van Ginkel, W. P., & Homan, A. C. (2013). Diversity mindsets and the performance of diverse teams. *Organizational Behavior and Human*

- Decision Processes, 121(2), 183-193. doi:10.1016/j.obhdp.2013.03.003
- Veestraeten, M., Kyndt, E., & Dochy, F. (2014). Investigating team learning in a military context. *Vocations and Learning*, 7(1), 75-100. doi:10.1007/s12186-013-9107-3
- Vogel, S., & Hicks, J. (2013, August 6). Federal eye: Pentagon reduces defense furloughs from 11 to 6 days. Retrieved from http://www.washingtonpost.com/blogs/federal-eye/wp/2013/08/06/pentagon-to-reduce-defense-furloughs-again/
- Wagner III, J. A., Humphrey, S. E., Meyer, C. J., & Hollenbeck, J. R. (2012).

 Individualism-collectivism and team member performance: Another look. *Journal of Organizational Behavior*, 33(7), 946-963. doi:10.1002/job.783
- Walker, D. M. (2005). 21st century challenges: Transforming government to meet current and emerging challenges: Testimony before the Subcommittee on the Federal Workforce and Agency Organization, Committee on Government Reform, House of Representatives. GAO-05-830T. Retrieved from http://www.gao.gov/cgi-bin/getrpt?GAO-05-830T
- Walker, R. M., Brewer, G. A., Boyne, G. A., & Avellaneda, C. N. (2011). Market orientation and public service performance: New public management gone mad? *Public Administration Review*, 71(5), 707-717. doi:10.1111/j.1540-6210.2011.02410.x
- Wang, M. L., & Hsu, B. F. (2012). A study to explore the virtualization level and team effectiveness from the team personality composition. *Journal of the Knowledge Economy*, *3*(2), 199-216. doi:10.1007/s13132-011-0079-y

- Wang, D., Waldman, D. A., & Zhang, Z. (2014). A meta-analysis of shared leadership and team effectiveness. *Journal of Applied Psychology*, 99(2), 181-198. doi:10.1037/a0034531
- Warner, S., Bowers, M. T., & Dixon, M. A. (2012). Team dynamics: A social network perspective. *Journal of Sport Management*, *26*(1), 53-66. Retrieved from http://journals.humankinetics.com/jsm
- Warrick, D. D. (2014). What leaders can learn about teamwork and developing high performance teams from organization development practitioners. *Organization Development Practitioner*, 46(3), 68-75. Retrieved from http://www.odnetwork.org
- Weimann, P., Hinz, C., Scott, E., & Pollock, M. (2010). Changing the communication culture of distributed teams in a world where communication is neither perfect nor complete. *The Electronic Journal Information Systems Evaluation*, *13*(2), 187-196. Retrieved from http://www.ejise.com/volume13/issue2
- Weiss, R. S. (1994). Learning from strangers: The art and method of qualitative interview studies. NY, NY: The Free Press, Simon & Schuster, Inc.
- Whatley, L. R. (2012). Individual "states" model for healthy group dynamics.

 *Organization Development Journal, 30(3), 40-53. Retrieved from http://www.isodc.org
- Wiedow, A., Konradt, U., Ellwart, T., & Steenfatt, C. (2013). Direct and Indirect effects of team learning on team outcomes: A multiple mediator analysis. *Group Dynamics: Theory, Research, and Practice, 17*(4), 232-251.

- doi:10.1037/a0034149
- Wiewiora, A., Trigunarsyah, B., Murphy, G., & Coffey, V. (2013). Organizational culture and willingness to share knowledge: A competing values perspective in Australian context. *International Journal of Project Management*, *31*(8), 1163-1174. doi:10.1016/j.ijproman.2012.12.014
- Wildman, J. L, Salas, E., & Scott, C. P. R. (2014). Measuring cognition in teams: A cross-domain review. *Human Factors*, *56*(5), 911-941. doi:10.1177/00187320813515907
- Wildman, J. L., Shuffler, M. L., Lazzara, E. H., Fiore, S. M., Burke, C. S., Salas, E., & Garven, S. (2012). Trust development in swift starting action teams: A multilevel framework. *Group and Organization Management*, 37(2), 137-170. doi: 10.1177/1059601111434202
- Wilson, J. Q. (2000). Bureaucracy: What government agencies do and why they do it (2nd ed.). Jackson, TN: Basic Books, Inc.
- Windeler, J., Maruping, L. M., Robert, L. P., & Riemenschneider, C. K. (2015). E-profiles, conflict, and shared understanding in distributed teams. *Journal of the Association for Information Systems*, *16*(7), 608-645. Retrieved from: http://aisel.aisnet.org/jais/vol16/iss7/1
- Wirth, J. H., Turchan, P. J., Zimmerman, A. G., & Bernstein, M. J. (2014). Atimia: A novel group-based paradigm for manipulating ostracism and group members' performance. *Group Dynamics: Theory, Research, and Practice, 18*(3), 251-266. doi:10.1037/gdn000006

- Wise, S. (2014). Can a team have too much cohesion? The dark side to network density. *European Management Journal*, 32(5), 703-711. doi:10.1016/j.emj.2013.12.005
- Woehr, D., J., Arciniega, L. M., & Poling, T. L. (2013). Exploring the effects of value diversity on team effectiveness. *Journal of Business Psychology*, 28(1), 107-121. doi:10.1007/s10869-012-9267-4
- Wolcott, H. F. (2009). *Writing up qualitative research* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Wölfer, R., Faber, N. D., & Hewstone, M. (2015). Social network analysis in the science of groups: Cross-sectional and longitudinal applications for studying intra- and intergroup behavior. *Group Dynamics: Theory, Research, and Practice, 19*(1), 45-61. doi:10.1037/gdn0000021
- Wu, C.-H., & Wang, Z. (2015). How transformational leadership shapes team proactivity: The mediating role of positive affective tone and the moderating role of team task variety. *Group Dynamics: Theory, Research, and Practice, 19*(3), 137-151. doi:10.1037/gdn0000027
- Wu, M., Wu, H., Xie, T., & Lu, J. (2015, August 12). Research on conflict behavior of top management team in family enterprises: A complex network perspective.
 Mathematical Problems in Engineering, 2015, 1-12. doi:10.1155/2015/524328
- Xie, X.-Y., & Luan, K. (2014). When business becomes personal: The catalyst implication of subgroup perception underlying the co-occurrence of task and relationship conflict. *Group Dynamics: Theory, Research, and Practice, 18*(1), 87-99. doi:10.1037/a0035689

- Yammarino, F. J., Mumford, M. D., Connelly, M.S., & Dionne, S. D. (2010).

 Leadership and team dynamics for dangerous military contexts. *Military Psychology*, 22(Suppl. 1), S15-S41. doi:10.1080/08995601003644262
- Yampolsky, M. A., & Amiot, C. E. (2013). Priming self-determined and non-self-determined group identification: Effects on well-being and ingroup bias. *Group Dynamics, Theory, Research, and Practice, 17*(3), 137-149.

 doi:10.1037/a0032825
- Yang, S. B., & Guy, M. E. (2011). The effectiveness of self-managed work teams in government organizations. *Journal of Business Psychology*, 26(4), 531-541. doi:10.1007/s10869-010-9205-2
- Yang, L. R., Huang, C. F., & Wu, K. S. (2011). The association among project manager's leadership style, teamwork, and project success. *International Journal* of Project Management, 29(3), 258-267. doi:10.1016/j.ijproman.2010.03.006
- Yeatts, D. E., & Hyten, C. (1998). *High-performing self-managed work teams: A comparison of theory to practice*. Thousand Oaks, CA: Sage Publications.
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage Publications.
- Young, M., & Dulewicz, V. (2008). Similarities and differences between leadership and management: High-performance competencies in the British Royal Navy. *British Journal of Management*, 19(1), 17-32. doi:10.1111/j.1467-8551.2007.00534.x
- Yuan, J., & Jing, R. (2014). Good to great: Build strong and vital teams. *International Journal of U- and E-Service, Science and Technology, 7*(1), 37-50.

- doi:10.14257/ijunesst.2014.7.1.04
- Zenk, L., Stadtfeld, C., & Windhager, F. (2010). How to analyze dynamic network patterns of high performing teams. *Procedia Social and Behavioral Sciences*, 2, 6418-6422. doi:10.1016/j.sbspro.2010.04.051
- Zhang, X., de Pablos, P. O., & Xu Q. (2014). Culture effects on the knowledge sharing in multi-national virtual classes: A mixed method. *Computers in Human Behavior*, *31*, 491-498. doi:10.1016/j.chb.2013.04.021
- Zhang, X., Venkatesh, V., & Brown, S.A. (2011). Designing collaborative systems to enhance team performance. *Journal of the Association for Information Systems*, 12(8), 556-584. Retrieved from http://aisel.aisnet.org/jais/vol12/iss8/2

Appendix A: Text of E-mail Invitation to Participate in the Study

Dear Department of Defense Professional,

I would like to invite your participation in a study of DoD members' experiences participating in teams outside a deployed environment. The purpose of my study is to understand how nondeployed DoD team members work in teams to meet organizational goals and how they interact with other DoD teams. The findings of this study may identify practices to address sequestration-mandated budget and personnel cuts.

Participation in the study will be via an interview designed to gain insights into your experiences working in DoD teams. Your decision to share your views will be confidential, as will any responses you provide. Before participating in the interview, however, please read the enclosed informed consent form carefully. It contains specific details about the processes and nature of this study. If you elect to participate in the study, please do not review, fill out, or complete any study-related materials during work hours; all materials, including responding to interview questions, must be completed and returned during your off-time, away from work. If you still desire to participate in the study after reviewing the informed consent form, during your off-time, away from work, please sign the form and return it to me via email at: [Researcher's Walden University email address]. I will then contact you to discuss completion of the interview process.

Thank you for your time and for your potential participation in this study.

Sincerely,
Denise Miller
[Researcher's Walden University email address]

Appendix B: Semistructured Interview Protocol Alignment with Research Questions

- 1. Please describe an experience as a member of a DoD team in a nondeployed, office environment when the team exceeded its goals. What made this team successful? [Addresses research question (RQ) 1 and RQ2.]
- 2. Please describe an experience as a member of a DoD team in a nondeployed, office environment when the team did not meet its goals. What contributed to this team's inability to meet its goals? [Addresses RQ1 and RQ2.]
- 3. Please describe the types and availability of resources given to your team when it exceeded its goals. [Addresses RQ1 and RQ2.]
 - 3a. How did this differ from when your team did not meet its goals? [Addresses RQ1 and RQ2.]
- 4. How did your most successful team contribute to your organization's goals?
 [Addresses RQ3.]
- 5. How did team members interact with one another when your team was most successful in meeting its goals? [Addresses RQ1 and RQ2.]
- 6. Please describe how this team helped other teams to adopt successful team practices. [Addresses RQ4.]
- 7. High performing teams are comprised of members who share a sense of purpose, possess complementary skills, are committed to one another and exceed organizational goals. How do these characteristics describe any of your DoD team experiences? [Addresses RQ1 and RQ2.]

8. Is there anything I have not asked about your experiences as a DoD team member that you would like to share to help inform the findings of this study?

[May address any research question.]

Appendix C: Virtual Interview Questionnaire

Dear DoD Professional,

Thank you for your willingness to participate in this study. Please answer the questions below *during your off-time, away from work,* and return this file to [Researcher's Walden University email address] within 7 days of receipt. I will contact you within 48 hours of receipt of your inputs to set an appointment at a time of your choosing to complete the process.

Please tell me a bit about your DoD experiences:

- o Are/were you Enlisted, Officer, Civilian?
- o How many years did you serve?
- Which branch of service(s)?

The following interview questions are intended to gain insights into your specific team experiences; please provide as much information as you are comfortable, but please do not offer specific names, dates, or places to aid in preserving confidentiality.

- 1. Please describe an experience as a member of a DoD team in a non-deployed, office environment when the team exceeded its goals. What made this team successful? Please provide your answer here:
- 2. Please describe an experience as a member of a DoD team in a non-deployed, office environment when the team did not meet its goals. What contributed to this team's inability to meet its goals?

Please provide your answer here:

- 3. Please describe the types and availability of resources given to your team when it exceeded its goals. *Please provide your answer here:*
 - 3a. How did this differ from when your team did not meet its goals?

Please provide your answer here:

4. How did your most successful team contribute to your organization's goals?

*Please provide your answer here:

5. How did team members interact with one another when your team was most successful in meeting its goals?

Please provide your answer here:

6. Please describe how this team helped other teams to adopt successful team practices.

Please provide your answer here:

- 7. High-performing teams are comprised of members who share a sense of purpose, possess complementary skills, are committed to one another and exceed organizational goals. How do these characteristics describe any of your DoD team experiences? *Please provide your answer here:*
- 8. Is there anything I have not asked about your experiences as a DoD team member that you would like to share to help inform the findings of this study?

Please provide your answer here:

Thank you again for your time and participation in this study.

Sincerely,
Denise Miller
[Researcher's Walden University email address]

Appendix D: Participant Demographics

This appendix contains information about the nature of each study participant's DoD association, including type and approximate years of service.

Table D1

Study Participant Demographics

Participant	Military or Civilian Experience or Both	Years of DoD Experience
21	Military and Civilian	11-20
22	Military	11-20
23	Civilian	11-20
24	Civilian	0-10
25	Military	More than 20
6	Military and Civilian	More than 20
7	Civilian	11-20
28	Civilian	0-10
9	Military	More than 20
10	Military	More than 20
11	Civilian	0-10
12	Military and Civilian	11-20
13	Military	11-20
214	Military and Civilian	More than 20
215	Military and Civilian	More than 20
216	Military	11-20
217	Civilian	More than 20
218	Military and Civilian	More than 20
219	Military	11-20

Participant	Military or Civilian Experience or Both	Years of DoD Experience
P20	Military and Civilian	11-20
P21	Civilian	0-10
P22	Civilian	11-20
P23	Military	More than 20
P24	Military	More than 20
P25	Military and Civilian	More than 20
P26	Military and Civilian	More than 20
P27	Military	More than 20
P28	Civilian	0-10
P29	Civilian	0-10
P30	Military	11-20
P31	Military and Civilian	More than 20
P32	Military and Civilian	More than 20
P33	Military	11-20
P34	Civilian	0-10
P35	Military	0-10
P36	Military	More than 20
P37	Military	11-20
P38	Military and Civilian	More than 20
P39	Military and Civilian	More than 20

Note: To preserve participant confidentiality, this table neither identifies a participant's branch of military service nor a participant's specific number of years of DoD experience.

Appendix E: Coding Matrices

The tables in this Appendix highlight codes employed when examining data collected during this study and related references from the literature.

Table E1

Team Structure Codes and Observations

Code Name	Abbreviation: TS-XXXX	Definition	Observed in Participant Responses:	Representational References
Team-building (added post-pilot study analysis)	TS-BLDG	Any description of activities or experiences contributing to a shared perception of a cohesive team.	P6, P11, P18, P19, P23, P24, P27, P28, P35, P37, P38	Aubé & Rousseau, 2014; Bruner, Eys, Beauchamp, & Côté, 2013; Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 1993, 2006; Kenny, Gomes, & Kowal, 2015; Pentland, 2012
Focus / Purpose (identified pre-pilot study code)	TS-FOCS	Any description of team member agreement upon the role of the team's focus or purpose.	P1, P3, P4, P5, P6, P8, P10, P11, P12, P14, P16, P18, P21, P22, P24, P26, P27, P28, P31, P32, P33, P34 P36, P37, P38, P39	Bush, Abbot, Glover, Goodall, & Smith, 2012; Daspit, Tillman, Boyd, & Mckee, 2013; de Waal, 2011; Edmondson, 2012; Katzenbach & Smith, 2006; Newcomb, 1950; Schillemans, 2013; Sherif, 1958

Code Name	Abbreviation: TS-XXXX	Definition	Observed in Participant Responses:	Representational References
Goals (identified pre- pilot study code)	TS-GOAL	Any description team members understand and share goals.	P3, P4, P5, P6, P11, P13, P15, P16, P18, P19, P25, P26, P27, P29, P30, P33 P37, P39	DeJong & Elfring, 2010; de Waal, 2010; Edmondson, 2012; Hu & Liden, 2011; Johnson & Johnson, 2013; Katzenbach & Smith, 1993, 2006; Kleingeld, van Mierlo, & Arends, 2011; Meyer, 2013; Office of Management and Budget, 2013; Yang & Guy, 2011
Interdependence (identified pre-pilot study code)	TS-INTD	Any description of team member recognition of need for other members or working interdependently with complementary skillsets.	P1, P4, P5, P6, P7, P8, P10, P12, P20, P21, P22, P23, P24, P25, P27, P29, P30, P31, P34, P35, P36, P39	Aime, Humphrey, Derue, & Paul, 2014; Bechky & Okhuysen, 2011; Buljac, Van Woerkom, & Van Wijngaarden, 2013; Katzenbach & Smith, 1993, 2006; Lee, Lin, Huan, Huan, & Teng, 2015; Ozeki, 2015; Sherif, 1958; Stark, Bierly, & Harper, 2014

Code Name	Abbreviation: TS-XXXX	Definition	Observed in Participant Responses:	Representational References
Leader (identified pre-pilot study code)	TS-LEAD	Any reference to the role of team leaders (may be shared, rotational, or designated).	P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P21, P22, P23, P24, P26, P27, P28, P29, P30, P31, P32, P33, P34, P35, P36, P37, P38	Akdemir, Erdem, & Polat, 2010; Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011; Lewin, 1944b; Warrick, 2014
Team Member Roles (identified pre-pilot study code; originally included with "Personality")	TS-ROLE	Any description of how team members identify the role(s) they or other team members play on the team.	P5, P7, P8, P10, P20, P22, P24, P27, P31, P39	Belbin, 2010; Edmondson, 2012; Halfhill, Nielsen, Sundstrom, & Weilbaecher, 2005; Hu & Liden, 2011; Katzenbach & Smith, 2006; LePine, Buckman, Crawford, & Methot, 2011; Newcomb, 1950
Size (identified pre- pilot study code)	TS-SIZE	Any description about the number of team members.	P3, P8, P10, P14, P22, P23, P32	Albert & Fetzer, 2005; de Waal, 2005; Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 1993, 2006

Note: Team Structure codes aligned with participant responses addressing RQs 1 and 2.

Table E2

Team Member Codes and Observations

Code Name	Abbreviation: TM-XXXX	Definition	Observed in Participant Responses:	Representational References
Team Member Accountability for Results (added post- pilot study analysis)	TM-ACCT	Any description of team member accountability to one another or the organization.	P1, P2, P4, P11, P13, P22, P29, P32 P7: fear of account- ability	de Waal, 2010; Edmondson, 2012; Gardner, 2012a; Hauschildt & Konradt, 2012; Katzenbach & Smith, 1993, 2006; Tseng & Yeh, 2013
Team Member Attitude (added post-pilot study analysis)	TM-ATTD	Any description of team members' attitudes towards the goal, processes, organization, non- team members, or one another.	P1, P7, P8, P19, P27, P28, P30, P31, P37, P38	Cannon & Edmondson, 2001; Goodall, 2013; Salahuddin, 2010
Team Member Camaraderie (Added post-Field Study analysis)	TM-CAMR	Any description of camaraderie among team members.	P1, P4, P6, P7, P10, P11, P16, P19, P21, P22, P25, P26, P27, P28, P29, P33, P35, P37	Windeler, Maruping, Robert, & Riemenschneider, 2015

Code Name	Abbreviation: TM-XXXX	Definition	Observed in Participant Responses:	Representational References
Team Member Commitment (identified pre-pilot study code)	TM-CMMT	Any description of how team members are committed to the team, its goals, or the organization.	P1, P2, P3, P4, P5, P6, P7, P8, P9, P11, P13, P14, P15, P16, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P32, P33, P34, P35	de Waal, 2008; de Waal & Frijns, 2011; Edmondson, 2012; Johnson & Johnson, 2013; Katzenbach & Smith, 2006; Nohe, Michaelis, Menges, Zhang, & Sonntag, 2013; Veestraeten, Kyndt, & Dochy, 2014
Team Member Experiences (identified pre-pilot study code; originally included with "Skills")	TM-EXPS	Any description of team member experiences that contributed to perceived team efficacy.	P1, P2, P3, P5, P6, P8, P10, P18, P21, P24, P25, P27, P28, P29, P31, P32, P33, P34, P35, P36, P38	Katzenbach & Smith, 2006; Lewin, 1944b; Mathieu, Tannenbaum, Donsbach, & Alliger, 2014; Sierra, Andres, Solanas, & Leiva, 2010; Tannenbaum, Mathieu, Salas, & Cohen, 2012
Humor (added post-field study analysis)	TM-HUMR	Any description of the role of humor among team members.	P4, P7, P8, P10, P11, P22, P24, P28, P31	Gockel & Kerr, 2015
Team Member Motivation (added post-field study analysis)	TM-MOTV	Any description of team member motivation towards the team, its goals, the organization, or others.	P1, P3, P6, P9, P10, P11, P16, P23, P25, P27, P31, P32, P33	Chen & Bozeman, 2013; Emich, 2014; Gardner, 2012b; Hu & Liden, 2015

			Observed in	
	Abbreviation:	5	Participant	Representational
Code Name	TM-XXXX	Definition	Responses:	References
Team Member Personality (identified pre-pilot study code; originally included with "Roles")	TM-PERS	Any description by team members about the impact(s) of other team members' personalities on the team.	P8, P10, P12, P18, P38, P39	Arnulf, 2012; Aubé & Rousseau, 2014; Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011; Halfhill, Nielsen, Sundstrom, & Weilbaecher, 2005; Johnson & Johnson, 2013; LePine, Buckman, Crawford, & Methot, 2011; Molleman & Broekhuis, 2012; Wang & Hsu, 2012
Team Member Mutual Respect (added post-pilot study analysis)	TM-RSPT	Any description of how team members show respect (or disrespect) towards one another or others.	P1, P4, P7, P8, P9, P12, P13, P18, P23, P24, P26, P28, P30, P31, P37, P38, P39	Akdemir, Erdem, & Polat, 2010; Buengeler & Den Hartog, 2015; Edmondson, 2012; Katzenbach & Smith, 2006
Team Member Skills (identified pre-pilot study code; originally included with "Experiences")	TM-SKLS	Any description of a team member's skills.	P1, P2, P3, P5, P7, P8, P11, P13, P14, P16, P21, P23, P25, P26, P27, P30, P31, P32, P34, P35, P36, P38, P39	Edmondson, 2012; Gardner, 2012a; Katzenbach & Smith, 2006; Schouten, 2012

Note: Team Member codes aligned with participant responses addressing RQs 1 and 2.

Table E3

Team Awareness Codes and Observations

Code Name	Abbreviation: TA-XXXX	Definition	Observed in Participant Responses:	Representational References
High-performing Organizations (identified pre-pilot study code)	TA-HPOS	Any description by team members of their organizations as "high- performing" or encouraging high- performance.	P10	de Waal, 2010; Edmondson, 2012; Katzenbach & Smith, 1993, 2006
High-performing Team Awareness (identified pre-pilot study code)	TA-HPTS	Team members know or can recognize the components of high-performing teams see Chapter 1, operational definitions).	P5, P7, P8, P10, P12, P15, P18, P20, P23, P27, P38	Bush, Abbot, Glover, Goodall, & Smith, 2012; de Waal, 2008; Edmondson, 2012; Katzenbach & Smith, 1993, 2006
High-performing Team Member (identified pre-pilot study code)	TA-MHPT	Any description by team members indicating they know the components of high-performing teams or describe their team(s) as such.	P1, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P16, P20, P21, P22, P23, P24, P25, P26, P27, P28, P30, P31, P32, P33, P37, P38, P39	Bush, Abbot, Glover, Goodall, & Smith, 2012; de Waal, 2008; Edmondson, 2012; Katzenbach & Smith, 1993, 2006

Code Name	Abbreviation: TA-XXXX	Definition	Observed in Participant Responses:	Representational References
Organizational Goals (identified pre-pilot study code)	TA-ORGL	Team member level of awareness that team achievements are directly linked to organizational goals.	P2, P4, P5, P6, P7, P12, P20, P21, P22, P24, P28, P31, P32, P34, P39	OMB, 2013

Note: Team Awareness codes aligned with participant responses addressing RQs 2 and 3.

Table E4

Team Effectiveness Codes and Observations

Code Name	Abbreviation: TE-XXXX	Definition	Observed in Participant Responses:	Representational References
(Sense of) Accomplishment (identified pre-pilot study code)	TE-ACMP	Any description of team member or organizational satisfaction levels associated with team accomplishments.	P11, P14, P15, P19, P20, P24, P27, P29, P30, P32, P33, P39	Albert & Fetzer, 2005; Collins & Parker, 2010; Edmondson, 2012
(Senior) Champion / Top Cover (added post-field study analysis)	TE-CHMP	Any description of a senior champion or <i>top cover</i> whose support for the team affects team goal satiation or team effectiveness.	P5, P9, P10, P11, P12, P14, P15, P16, P19, P21, P22, P24, P28, P30, P32, P34	Edmondson, 2012; Naranjo-Gil, 2015
Cohesion (identified pre-pilot study code)	TE-CHSN	Any description of a team member's sense of cohesion.	P2, P10, P12, P21, P24, P27	Rosh, Offermann, & Diest, 2012; Siebold, 2011; Spink, Ulvick, McLaren, Crozier, & Fesser, 2015; Wise, 2014
Conflict—Process (The delineation of conflict among types (e.g. Process, Relationship, Task) was completed post- field study analysis.)	TE-CNFP	Any description of process-based conflict, whether internal or external to the team, perceived by team members to affect team effectiveness.	P1, P4, P24, P39	de Wit, Greer, & Jehn, 2012; Sherif, 1958; Stark & Harper, 2014

Code Name	Abbreviation: TE-XXXX	Definition	Observed in Participant Responses:	Representational References
Conflict— Relationship	TE-CNFR	Any description of relationship-based conflict, whether internal or external to the team, perceived by team members to affect team effectiveness.	P8, P10, P11, P12, P19, P24, P28, P30, P38, P39	Belbin, 2010; de Wit, Greer, & Jehn, 2012; Lo Coco, Gullo, Lo Verso, & Kivlighan, 2013; Santos & Passos, 2013
Conflict—Task	TE-CNFT	Any description of task-based conflict, whether internal or external to the team, perceived by team members to affect team effectiveness.	P2	de Wit, Greer, & Jehn, 2012; Klein, Knight, Ziegert, Lim, & Saltz, 2011
Communication Patterns (added post pilot study analysis)	TE-COMS	Any description of how team members communicate with one another or others.	P1, P5, P6, P8, P14, P16, P20, P22, P26, P27, P32, P33, P36, P37, P38	Carboni & Ehrlich, 2013; Pentland, 2012; Solis, Sinfield, & Abraham, 2013; Warner, Bowers, & Dixon, 2012

Code Name	Abbreviation: TE-XXXX	Definition	Observed in Participant Responses:	Representational References
Diversity (identified pre-pilot study code)	TE-DVRS	Any description of team member recognition of the impacts of diversity (e.g. personality, cultural, cognitive, gender, experiential, generational) on team effectiveness.	P3, P5, P8, P10, P13, P21, P22, P23, P25, P27	Dietrich, Eskerod, Akdemir, Erdem, & Polat, 2010; Dalcher, & Sandhawalia, 2010; Franck, Nuesch, & Pieper, 2011; Lehmann- Willenbrock, Allen, & Meinecke, 2014; Nissen, Evald, & Clark, 2014
Virtual Team Practices (added post-field study)	TE-ETMS	Any description of virtual teams or technology-based practices that affect team effectiveness.	P5, P8, P11, P32	Cordery & Soo, 2008; Martínez- Moreno, Zornoza, González-Navarro, & Thompson, 2012; Mesmer- Magnus, DeChurch, Jimenez- Rodriguez, Wildman, & Shuffler, 2011; Rentsch, Delise, Mello, & Staniewicz, 2014

Code Name	Abbreviation: TE-XXXX	Definition	Observed in Participant Responses:	Representational References
Failure (added post-field study)	TE-FAIL	Any description of team failures affecting team effectiveness, including positive learning resulting from the failure.	P1, P2, P3, P5, P6, P7, P8, P10, P11, P13, P14, P17, P18, P19, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P34, P35, P36, P37, P38	Cannon & Edmondson, 2001; Cantabrana, Minguell, & Tedesco, 2015; Edmondson, 2011a, 2012; Gardner, 2012a
Feedback (added post-field study)	TE-FDBK	Any description of feedback on team performance.	P1, P8, P9, P10, P15, P16, P18, P21, P23, P24, P26, P28, P31, P32, P34, P38	Albert & Fetzer, 2005; Akdemir, Erdem, & Polat, 2010; Bennett, Pitt, & Price, 2012; Curtis & Wright, 2001); Morier, Bryan, & Kasdin, 2013

Code Name	Abbreviation: TE-XXXX	Definition	Observed in Participant Responses:	Representational References
(Ability to meet goals or satisfy) Requirements (identified pre-pilot study code)	TE-REQS	Any description of teams that did or did not satisfy goals or requirements.	P2, P3, P8, P14, P16, P21, P25, P31, P38	Aubé and Rousseau, 2011; de Waal, 2010; Humphrey & Aime, 2014; Jiang & Chen, 2011; Johnson & Johnson, 2013; Katzenbach & Smith, 1993, 2006; Mathieu, Tannenbaum, Donsbach, & Alliger, 2014; Meyer, 2013; Sherif, 1958; Yang & Guy, 2011
Resources—Time (identified pre-pilot study code) Note: Updated post field study to address vagueness of original code, "Resources." (All participants identified types of resources when answering interview questions 3 and 3a.)	TE-RSCS	Any description of time as a resource.	P2, P5, P6, P7, P8, P11, P12, P14, P16, P18, P20, P22, P24, P27, P29, P30, P31, P32, P33, P38, P39	Mueller, 2014; Pluut, Flestea, & Curşeu, 2014; Ray & Bronstein, 1995

Code Name	Abbreviation: TE-XXXX	Definition	Observed in Participant Responses:	Representational References
Team Results (added post-pilot study analysis)	TE-RSLT	Any description of what the team achieved, such as efficiencies gained or goals satisfied.	P1, P2, P3, P4, P6, P7, P8, P9, P10, P11, P13, P14, P16, P19, P34, P38, P39	Buljac, Van Woerkom, & Van Wijngaarden, 2013; Seibert, Wang, & Courtright, 2011; Rutti, Ramsey, & Li, 2012; Wagner, Humphrey, Meyer, & Hollenbeck, 2012
Reward / Recognition (identified pre-pilot study code)	TE-RWDS	Any description of team rewards (internal, external; individual, team; intrinsic, extrinsic).	P1, P8, P10, P22, P23, P29, P30, P31, P33	Beersma, Hollenbeck, Humphrey, Moon, Conlon, & Ilgen, 2003; Dulebohn, Bommer, Liden, Brouer, & Ferris, 2011; Garbers & Konradt, 2014; Gilman & Raby, 2013; Li, Zhao, Walter, Zhang, & Yu, 2015; Nihalani et al., 2010; Ray & Bronstein, 1995

Code Name	Abbreviation: TE-XXXX	Definition	Observed in Participant Responses:	Representational References
Stability (added post-field study)	TE-STBL	Any description of the impacts of team member turnover.	P2, P3, P6, P8, P10, P24, P27, P34, P36	Buljac, Van Woerkom, & Van Wijngaarden, 2013; Katzenbach & Smith, 2006; Mathieu, Tannenbaum, Donsbach, & Alliger, 2014; Summers, Humphrey, & Ferris, 2012
Stress (added post-field study)	TE-STRS	Any description of the effects of stress or pressure on team effectiveness.	P2, P4, P8, P19, P27	Gardner, 2012a, 2012b
Strategy-building (added post-pilot study analysis)	TE-STRT	Any description of how the team developed initial strategies, mid-progress, or other late-stage strategies or reviews to update the strategy or approach. Includes "Commander's intent" and related guidance.	P1, P2, P4, P5, P6, P7, P8, P9, P10, P11, P12, P14, P16, P18, P20, P22, P23, P24, P26, P27, P29, P30, P31, P32, P33, P34, P35, P36, P37, P38	Bechky & Okhuysen, 2011; Cantabrana, Minguell, & Tedesco, 2015; Christian, Pearsall, Christian, & Ellis, 2014; Crawford & LePine, 2014; Guglielmi et al., 2011; Rentsch, Delise, Salas, & Letsky, 2010

Code Name	Abbreviation: TE-XXXX	Definition	Observed in Participant Responses:	Representational References
Trust (identified pre-pilot study code)	TE-TRST	Any description of how team members display trust or how trust affects team outcomes (effectiveness).	P1, P4, P5, P7, P8, P11, P13, P14, P18, P24, P26, P27, P28, P35, P37, P38	Albrecht & Travaglione, 2003; De Jong & Elfring, 2010; DeOrtentiis, Summers, Ammeter, Douglas, & Ferris, 2013; Katzenbach & Smith, 1993, 2006; Moldjord & Iversen, 2015; Poepsel, Schroeder, Harris, & Liu, 2013; Sheng, Tian, & Chen, 2010; Wiedow, Konradt, Ellwart, & Steenfatt, 2013

Note: Team Effectiveness codes aligned with participant responses addressing RQs 1, 2, and 3.

Table E5

Team Transference Codes and Observations

Code Name	Abbreviation: TT-XXXX	Definition	Observed in Participant Responses:	Representational References
Collaboration (External) (separated code between Internal / External post-field study)	TT-CLBE	Any description of how the team shares knowledge through collaboration with others, external to the team.	P2, P3, P8, P9, P15, P22, P24, P26, P32, P33, P38	Bennett, Pitt, & Price, 2012; Denholm & Kangas, 2010; Linden, 2010
Collaboration (Internal)	TT-CLBI	Any description of how the team shares knowledge through collaboration internal to the team.	P5, P7, P8, P13, P22, P24, P26, P30	Bennett, Pitt, & Price, 2012; Dietrich, Eskerod, Dalcher, & Sandhawalia, 2010; Edmondson, 2012; Goodall, 2013
Knowledge Sharing (identified pre-pilot study code)	TT-KWSH	Any description of how team members share knowledge with one another or others, including post-event, after action reviews and documentation of lessons learned.	P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P12, P16, P22, P24, P26, P27, P28, P30, P31, P34, P36, P38, P39	Joy & Haynes, 2011; Mueller, 2014; Zhang, de Pablos, & Xu, 2014

Code Name	Abbreviation: TT-XXXX	Definition	Observed in Participant Responses:	Representational References
Model (added post-field study)	TT-MODL	Any description of the team serving as an example of or benchmark for excellence.	P3, P10, P11, P13, P14, P15, P17, P21, P23, P24, P25, P27, P29, P33, P35, P38	Katzenbach & Smith, 1993; 2006
Network (identified pre-pilot study code)	TT-NTWK	Any description of team or team member networking practices (social, resource, internal, external).	P5, P7, P8, P10, P15, P18, P22, P26, P27, P28, P32, P38	Carboni & Ehrlich, 2013; Cross, Erlich, Dawson, & Helferich, 2008; Solis, Sinfield, & Abraham, 2013; Warner, Bowers, & Dixon, 2012
Training (identified pre-pilot study code)	TT-TRNG	Any description of team member training leading to shared knowledge within and outside the team.	P2, P4, P5, P6, P8, P9, P10, P19, P22, P23, P24, P27, P31, P32, P35, P36, P37, P38	Akdemir, Erdem, & Polat, 2010; Edmondson, 2012; Lehmann- Willenbrock, Allen, & Meinecke, 2014; Ray & Bronstein, 1995; Warrick, 2014

Code Name	Abbreviation: TT-XXXX	Definition	Observed in Participant Responses:	Representational References
Virtual Issues (Members, Communication) (identified pre-pilot study code)	TT-VIRT	Any description of team use of virtual practices or technology to share or convey knowledge or training (e.g. making team information available through SharePoint or other sites; hosting videoteleconferences).	P11, P18, P32	Cha, Park, & Lee, 2014; Weimann, Hinz, Scott, & Pollock, 2010; Cordery & Soo, 2008; Edmondson, 2012; Johnson & Johnson, 2013; Tannenbaum, Mathieu, Salas, & Cohen, 2012

Note: Team Transference codes aligned with participant responses addressing RQ4.

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[Student Walden University email address]

[Copy of Study Table 1]

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Note: Permission 1 reflects a request for permission to include information contained in Figure 2:

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Denise Miller [Student Walden University email address] Mon, Feb 22, 2016 at 7:09 PM

Mr. Morrill,

Many thanks for your kind approval and extremely prompt response!

Best. Denise