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ACCEPTANCE

This dissertation, EXPLORING EMPLOYEES' PERCEPTIONS OF THE LEARNING ORGANIZATION AND THEIR LEARNING EXPERIENCES IN A GEORGIA STATE GOVERNMENT AGENCY – A CONCURRENT MIXED METHODS STUDY, by OLUFUNMILAYO (FUNMI) A. ADESESAN, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree, Doctor of Philosophy, in the College of Education & Human Development, Georgia State University.

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**EXPLORING EMPLOYEES' PERCEPTIONS OF THE LEARNING ORGANIZATION
AND THEIR LEARNING EXPERIENCES IN A GEORGIA STATE GOVERNMENT
AGENCY – A CONCURRENT MIXED METHODS STUDY**

by

Olufunmilayo (Funmi) A. Adesesan

Under the Direction of Janice B. Fournillier Ph.D.

ABSTRACT

This concurrent Mixed Methods (MM) research study explored employee learning perceptions and experiences in a state of Georgia government agency. The study used the Dimension of the Learning Organization Questionnaire (DLOQ) to examine employee perceptions of a learning organization across management levels and tenure. It also used semi-structured phenomenological interviews to examine learning experiences. The two questions that framed the study were: (1) How do employees navigate learning individually, in teams, and organizationally? (2) How do employee perceptions of the learning organization compare based on tenure and management level? The concurrent mixed methods design allowed for comparison of findings from the questionnaire and the interviews. Participants were simultaneously recruited from the same state of Georgia government agency to complete the questionnaire and interview voluntarily. Three hundred and thirty-eight (338) employees responded to the questionnaire, the quantitative (QUAN) strand. Five (5) employees participated in the interviews, the qualitative (QUAL) strand. The interview data was analyzed using a hybrid/eclectic methodology of coding, theming, and analytic memos. The questionnaire data was analyzed using descriptive and non-parametric statistical tests. The findings of the study suggest that leadership influences learning

critically. For this organization to continue learning and growing, it must focus on the leaderships' impact on its employees' learning in the work environment. Additionally, significant differences in employee perceptions of the learning organization were observed. These differences were between employees with 6 to 10 years and those with 16 to 20 years of tenure on Inquiry/Dialogue (Dimension 2), Organization Environment Connection (Dimension 6), and Individual Level learning (Level 1). While the findings present possible explanations for the differing perceptions, future research should examine this further.

Keywords: leadership and learning, employee learning, employee perceptions, learning organization, DLOQ, workplace learning, Georgia state government, mixed-methods design, phenomenological interviews.

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A Dissertation

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Doctor of Philosophy

in

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in

Department of Educational Policy Studies

in

the College of Education and Human Development

Georgia State University

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2021

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My Ph.D. journey was birthed in 2009 when my husband, Mr. Adetunji Adesesan, encouraged me to pursue a graduate degree in Education. I received a Bachelor of Arts in Computer Information Systems a few years after Y2K (2000) and the September 11, 2001 tragedy. Both events negatively impacted the economy resulting in a highly competitive job market in the information technology (IT) field. Jobs that would have been accessible to me as an inexperienced new graduate were sought after by much more qualified recently unemployed applicants. After about two years of intensive and unfruitful job searching in IT, I expanded my search and gained experience in other fields.

In 2007, I was hired by my first Georgia state government agency and worked there for five years. My job role and duties were completely unrelated to my undergraduate degree, or so I thought. Now, I understand that no knowledge is ever lost. Back in 2007, I imagined my tenure in state government would not exceed five years. Here I am in 2021, a fulfilled and invested state government employee, presenting a case for improving learning in a state government agency. As of 2021, I have worked in three Georgia state government agencies and have had varying experiences across each agency. Some of my experiences solidified my interest in examining adult learning in non-school contexts, one being the workplace.

In 2010, I enrolled in the Master of Educational Research program at Georgia State University (GSU). My focus was to learn research methodologies that could be applied to different disciplines in addition to education. I trusted the Research, Measurement, and Statistics program at GSU to equip me with the tools to become a researcher and methodologist. I completed the master's program in 2012 and immediately secured a job with my second Georgia state agency as a policy and planning development specialist. During the interview, the panel

outrightly alluded to my strong research and statistical focus as a contributing factor to being shortlisted. I immediately enrolled in the Educational Policy Studies doctorate program in the College of Education and Human Development (CEHD) department at GSU in 2012. As I reflect on my journey, I am convinced that God placed people in my path to get me here. It would be an injustice to assume all credit for embarking, continuing, and completing this venture. My sincerest thanks and acknowledgements go to the following instrumental individuals:

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aspiring to beat that, but here I am, a true daughter of my father, also graduating at 44. Thank you, mom and dad, for your unwavering support. This is as much your accomplishment as it is mine.

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A popular saying goes, “It takes a village to raise a child.” Everyone mentioned here, among many others, have been an invaluable part of my village. I am still growing and learning. In this respect, I desire to remain a child at heart, always seeking, staying curious, imaginative, and open to the endless possibilities. I am immensely grateful to all that have been a part of my life’s journey. I know I will periodically reflect on the roles you have played and will still play in the years ahead as I pay it forward. Thank you.

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ACRONYMS AND ABBREVIATIONS

ATD	Association for Talent Development
ANOVA	Analysis of Variance
CDP	Career Development Program
CDTL	Cross-Disciplinary Team Learning
CFA	Confirmatory Factor Analysis
DLOQ	Dimensions of the Learnin Organization Questionnaire
HRD	Human Resource Development
MM	Mixed Methods
QUAL	Qualitative
QUAN	Quantitative
SEM	Structural Equation Modeling

The Phenomenon

There is an abundance of research on adult learning in different contexts including the workplace. However, only a few examine this phenomenon in state government agencies. A few studies in the government context considered policy implications for adult learning. These studies explored the role the government plays in adult learning (Boyer, 2000; Hoffman, 2015; Quintero & Tuckett, 2007; United States Accountability Office, 2010). They generally focused on benefits to be realized from improved adult literacy and numeracy in the workplace. The outcome of these studies were policy recommendations proposed for government implementation. These studies did not focus on the employee as the adult learner in the government workplace. A few other research studies that examined the government space as the setting for adult learning were not in the United States. They were in other industrialized countries like Australia (McKay, 2011). Similarly, there is a plethora of research that examines the dimensions of a learning organization in non-governmental settings (Davis & Daley, 2008; Huber, 2002; Kumar et al., 2016; Leufvén et al., 2015; Little & Swayze, 2015; Marsick, 1988, 2013; Marsick & Watkins, 1993, 1996, 1997, 1999, 2003; Ortenblad, 2002; Watkins, 1992; Watkins & Marsick, 1993, 1996). However, there is a dearth of research on the dimensions of a learning organization in specific government agencies. Therefore, the current study examines employee perceptions of a learning organization and their learning experiences in a Georgia state government agency. Watkins & Marsick (1993, 2004) developed and validated the Dimensions of the Learning Organization Questionnaire (DLOQ). It measures employee perceptions of seven (7) research-driven dimensions of a learning organization universally acknowledged by researchers and experts in the human resource development (HRD), adult learning, and organizational learning communities.

I hoped that the study would identify and provide insights from which directed action could be taken to:

- I. Improve learning practices and opportunities for employees in this of Georgia state government agency.
- II. Sustain and enhance values of a learning organization in this of Georgia state government agency.
- III. Create awareness regarding the dimensions of a learning organization.

The study therefore examined employees' perceptions of the learning organization and their learning experiences. The following research questions framed the study:

1. How do employees navigate learning individually, in teams, and organizationally in this Georgia state government agency?
2. How do employee perceptions of the learning organization compare based on tenure and management level?

The goal of this study was to examine employees' learning experiences and perceptions in this Georgia state government agency. The study sought to understand the lived experiences of employees as it pertains to learning in the workplace. It also compared employees' perceptions of the dimensions of the learning organization based on their management level and tenure (length of employment). Jarvis' model of adult learning theory served as the primary theoretical framework in this examination of: Continuous Learning Opportunities (Dimension 1); Inquiry & Dialogue (Dimension 2); Collaboration & Team Learning (Dimension 3); Created Systems & Shared Learning (Dimension 4); Collective Vision (Dimension 5); Organization-Environment Connection (Dimension 6); and Strategic Leadership for Learning (Dimension 7). The study also examined employees' perceptions and experiences on learning at the individual, team, and

organizational levels. The Dimensions of a Learning Organization Questionnaire (DLOQ) was the data collection instrument for perceptions of the learning dimensions and levels. Semi-structured phenomenological interviews were used to elicit employees' lived learning experiences.

Significance of the Study

Georgia state government employees were at least 18 years old and were therefore categorized as adults. Watkins and Marsick's (1993, 2003) individual level emphasize the individual, the adult learner, as the foundation. In the workplace, these individuals are the employees. Since individuals make up the organization, it was important to examine adult (employee) learning when studying a learning organization. There are limited studies that situate adult learning in state government. This study highlights opportunities to enhance learning among adult learners in a Georgia state government agency. Additionally, it examines employee perceptions of a learning organization.

There are numerous, often interrelated and overlapping, theories on how adults learn. People have always wondered if adults learn differently from children. There is also interest in distinguishing markers in adult learning and other areas of education. Social scientists have questioned what characteristics about the learning transaction with adults could maximize their learning. Prior to the 1970s, adult educators relied primarily on a psychological understanding of learning to inform their practice. However, the 1970's brought a turn in focus to research and theory building on adult learning. Since then, researchers have discovered that there is no single theory of adult learning. Similarly, there is no single theory that explains all human learning. Rather, they have theorized several frameworks that collectively contribute to the understanding of adults as learners (Merriam et al., 2007). These theories individually present a conceptual

framework for how learning is perceived to take place. Regardless of theoretical inclinations on adult learning, one unanimous understanding is that it happens in the workplace. As the workplace is one setting in which learning occurs, it is important to consider structures and conditions that influence learners as individuals. Similarly, it is important to consider structures such as an organization, that influence the learner as an entity. In examining these structures, we inherently examine conditions that influence the learning process. Watkins and Marsick (1996) view a learning organization as one that has the capacity to integrate people and structures to move toward continuous learning and change. Yang et al.'s (2004) review of the learning organization revealed varying definitions and perspectives of the construct (p. 34). They explain that organizations use a variety of ways to learn. Therefore, their behaviors could be reported from as many perspectives as there are observers. The learning organization is a construct that researchers claim embodies interpretable learning behaviors in organizations. Notwithstanding the different perspectives of a learning organization, some common characteristics have been identified that unify them. All perspectives assume that learning organizations are organic entities like individuals and have the capacity to learn. They all draw a clear distinction between the learning organization and organizational learning. The construct of the learning organization refers to organizations that have displayed (or worked to instill) continuous learning and adaptive characteristics. Contrastingly, organizational learning denotes collective learning experiences used to acquire knowledge and develop skills. Finally, all perspectives agree that the learning organization traits should be reflected in different organizational levels - the individual, team or group, and structural or system levels.

Adults learn in traditional educational settings like schools and colleges – which many characterize as formal learning – or in non-traditional educational settings, such as the workplace

– which many characterize as informal learning. Regardless of the setting, there is a lot to be gained from a focus on employee learning. Employees may realize increased self-worth, self-actualization, well-being, and fulfillment. Employers in turn may realize increased productivity, revenue, and improved employee retention. This research traverses several domains to include, but not limited to, Human Resource Development (HRD), Workplace Learning, Adult Learning, Formal & Informal learning, Education, and Organizational learning. The participants whose perceptions and experiences are examined do not compartmentalize their lives into discrete categories as outlined above but consider their experiences holistically. Although there is abundance of research in any combination of these areas, little exists that considers the learning organization and employees' lived experiences in a Georgia state government agency context. This study contributes to the body of knowledge through insights presented in chapters 4 and 5.

Overview of the Study

The current study employed a Concurrent/Parallel Mixed Methods (MM) Parallel Sampling research design. This consisted of a cross-sectional quantitative (QUAN) questionnaire study and qualitative (QUAL) interview study to examine employee learning experiences and perceptions of the learning organization. There are over 3000 employees in the Georgia state government agency. The questionnaire and interview participants voluntarily participated in the study. The DLOQ is an instrument that has been validated for measuring employee learning perceptions the learning organization. There is a short and long version. The researcher administered the long version comprising of forty-three (43) questions. The researcher also random-purposefully selected participants for the forty-five (45) minute long phenomenological interviews. Grbich (2013) defines phenomenology as “an approach that attempts to understand the hidden meanings and the essence of an experience together with how participants make sense

of these” (p.92). Grbich claims that while these ‘essences’ may not be known a priori; they can become known through meaningful interaction between researcher and respondents.

Organization of the Study

This study is divided into five chapters. Chapter 1 presents the introduction, which includes a description of the phenomenon, purpose of the study, and its significance. Chapter 2 provides a review and synthesis of current and related literature on: (a) the learning organization and organizational learning; (b) adult learning in non-school contexts; (c) workplace learning; (d) formal and informal learning in the workplace; (e) Human Resource Development (HRD); (f) organizational learning; (g) and leadership. Chapter 3 describes the research study methodology which elaborates on the study population, data collection procedures, data analysis process, and ethical issues. Chapter 4 presents the results and findings. Finally, Chapter 5 presents a discussion based on the findings and provides suggestions for future research and practice.

Review of the Literature

Chapter 2 integrates the concept of the learning organization with learning in the workplace. It synthesizes prior research in core areas which have implications for the learning organization: (a) organizational learning; (b) adult learning in non-school contexts; (c) workplace learning; (d) formal and informal learning in the workplace; (e) Human Resource Development (HRD); (f) and leadership.

Dimensions of the Learning Organization

According to Yang et al. (2004), the term dimensions is used to reflect different aspects of the construct of the learning organization. Bollen (1989) defines dimensions as “components that cannot be easily subdivided into additional components” (as cited in Yang et al., 2004, p.37). Marsick and Watkins’ (2003) basis for the DLOQ is grounded in their understanding of learning. They acknowledged adult learning models’ assumption that an educator structured the learning experiences. They also acknowledged that the workplace is governed by training structures (Marsick, 1988; Watkins, 1992). However, they could not overlook the researched-based fact that much valuable learning happens informally on the job (J. M. Huber Institute for Learning in Organizations, 2002). Marsick and Watkins’ (2003) understood that significant learning, even transformative learning, was usually the least structured and that the climate and culture must be amenable to it. Additionally, Yang et al. (2004), claimed that a workplace climate and culture were “built by leaders and other key people who learn from their experience, influence the learning of others, and create an environment of expectations that shapes and supports desired results” (p.134).

According to Watkins and Marsick (1993, 1996), there are three levels of a learning organization. The first is the individual level, which is comprised of two dimensions of the learning organization: Continuous learning and dialogue & inquiry. The second is the team or group level, which is reflected by team learning and collaboration. The third is the organizational level, which has four dimensions of a learning organization: Embedded systems, empowerment, system-environment connection, and strategic leadership for learning (refer to Tables 1 & 2 for DLOQ information). These three learning levels are collapsed into two components of a learning organization. They are the people who comprise an organization and the structures and culture created by the social institution of the organization (Leufvén et al., 2015). This framework illustrates the importance of a focus on people and facilitative structures that support learning if an establishment is becoming a learning organization (Marsick & Watkins, 2003; Watkins & Marsick, 1996; Yang, 2003). In the workplace, the people are the employees.

Table 1

Dimensions of the Learning Organization

#	Dimension	Definition
1	Create continuous learning opportunities (individual level)	Learning is designed into work so that people can learn on the job; opportunities are provided for ongoing education and growth.
2	Promote inquiry and dialogue (individual level)	People gain productive reasoning skills to express their views and the capacity to listen and inquire into the views of others; the culture is changed to support questioning, feedback, and experimentation.
3	Encourage collaboration and team learning (team level)	Work is designed to use groups to access different modes of thinking; groups are expected to learn together and work together; collaboration is valued by the culture and rewarded.
4	Create systems to capture and share learning (organization level)	Both high- and low-technology systems to share learning are created and integrated with work; access is provided; systems are maintained.
5	Empower people toward a collective vision (organization level)	People are involved in setting, owning, and implementing a joint vision; responsibility is distributed close to decision making so that people are motivated to learn toward what they are held accountable to do.

6	Connect the organization to its environment (organization)	People are helped to see the effect of their work on the entire enterprise; people scan the environment and use information to adjust work practices; the organization is linked to its community.
7	Provide strategic leadership for learning (organization level)	Leaders model, champion, and support learning, leadership uses learning strategically for business results.

Note. This table provides definitions for the seven dimensions of a learning organization as conceptualized by Watkins and Marsick (1993, 1996). It was retrieved from Little, J., & Swayze, S. (2015, p.84).

Table 2

DLOQ Questions, Level, and Dimension Relationship

DLOQ Questions	Learning Organization Dimension	Learning Organization Level
1-7	Continuous Learning Opportunities (Dimension 1)	
8-13	Inquiry & Dialogue (Dimension 2)	Individual
14-19	Collaboration & Team Learning (Dimension 3)	Team
20-25	Created Systems & Shared Learning (Dimension 4)	
26-31	Collective Vision/Empowerment (Dimension 5)	Organization
32-37	Organization-Environment Connection (Dimension 6)	
38-43	Strategic Leadership for Learning (Dimension 7)	

Watkins and Marsick (1996) stated that the organization must work with people at the individual and group level first. People must be empowered to take learning initiatives. In other words, “individuals learn first as individuals, but as they join together in organizational change, they learn as clusters, teams, networks, and increasingly larger units” (p. 4). They also suggested that the structural level learning activity could serve as a tool that incorporated individual and group learning into the organization’s mission and performance outcomes. “Although people initiate change on their own as a result of their learning, organizations must create facilitative structures to support and capture learning in order to move toward their missions” (Yang et al., 2004, p. 41).

After an extensive review of the literature on learning organizations, Ortenblad (2002) developed an archetype undergirded by these four considerations: (1) The organizational learning perspective, where learning is viewed as applications of knowledge at different levels across the organization; (2) workplace learning perspective, which considers a learning organization as one where individuals learn at the workplace; (3) the learning climate perspective, which perceives the learning organization as one that facilitates the learning of its employees and provides a conducive environment to its occurrence; and (4) the learning structure perspective, which regards the learning organization as a flexible entity, one that is highly adaptable and responsive to change. Ortenblad (2002) found Watkins and Marsick's (1993) approach to be the only theoretical framework that encompassed these four aspects of the learning organization (as cited in Yang et al., 2004). Watkins and Marsick's theoretical framework suggest that by studying a learning organization, one inherently examines its organizational learning, workplace learning practices, and learning climate. Therefore, given that learning organization is comprised of people and facilitative structures, I examined domains that contribute to both.

Following is a review of the literature associated with (a) organizational learning (facilitative structures) and how it relates to the learning organization; (b) Adult learning in non-school contexts (the people); (c) workplace learning, culture, and environment (facilitative structures); (d) formal & informal learning in the workplace (facilitative structures); (e) Human Resource Development (HRD) (the people); and (f) leadership role in employee learning (facilitative structures). Judging from the literature, there is no clear limit of scope among the domains, which comprise the learning organization. The influence and scope of each appear to be interconnected. In other words, these domains overlap. There is no distinct start and end for

each domain. They all intersect. For example, an examination of the leader's role in employee learning also explores how adults learn. This same examination of the leader's role in employee learning also explores the leader's emotional intelligence and leadership style. Similarly, an examination of the work environment and culture also examines the critical roles of organizational leaders in creating it. The current study examined employees' perceptions of the learning organization and their learning experiences in a state government agency. Given the described intersectionality of the domains, I highlight, discuss, summarize, and synthesize concepts from these areas in the ensuing literature review.

Organizational Learning & the Learning Organization

Organizational learning occurs when members of the organization act as learning agents of the organization (Argyris & Schön, 1978). These members, employees in this study, respond to changes in the internal and external environments of the organization and correct errors they detect in practice. Argyris & Schön (1974) explain this process of error correction or problem solving as single-loop learning. They explained that in single loop learning, “we learn to maintain the field of constancy by learning to design actions that satisfy existing governing variables”. They contrast this with double loop learning where “we learn to change the field of constancy itself” (Argyris & Schön, 1974 as cited in Jarvis et al., 2003, pp. 68-69). Jarvis et al. (2003) provided this illustration of both concepts:

Suppose a situation is in harmony and then something destroys it. In single loop learning, we learn to solve the problem and adjust our behavior without changing the situation itself. With double loop learning, we ask questions about the situation which caused the need to adjust our behavior. It is in effect the difference between problem solving and problematizing the situation within which the problem emerged. (p. 69)

Given the above illustration, we can infer that single and double loop learning are inherent in organizational learning. While single loop learning focuses on reactive problem solving, double loop learning proactively focuses on systemic and strategic changes needed within the organization. In organizational learning, members of the organization embed the results of their enquiry in private images and shared maps of organization. The 'shared maps' connote collective learning experiences. Although the learning is done in service to the organization, Merriam et al. (2007) emphasize the individuals (employees) are the people engaged in the learning transaction. As mentioned earlier, one of the two components of the learning organization is the people. The learning organization, a concept which differs from organizational learning, is characterized by its innovativeness. Olsen (2016) describes innovation as a "gradual process whereby people, firms, and nations learn from their joint attempts to solve problems and develop knowledge" (p.210). A common trait of innovative organizations is their adaptability to change, making them learning organizations (Olsen, 2016). She references empirical studies (Amin & Cohendet, 2004; Nonaka et al., 1999) which have demonstrated that certain forms of flexible organizations make it easier for informal groups or communities to develop in the workplace. These communities provide appropriate environments for learning and creativity to occur, resulting in new discoveries.

Learning in the innovative firm, the learning organization, can be characterized as occurring among groups of highly educated employees. These employees have freedom to plan their work, take their own decisions, and access to further education. In this setting, tasks are centered on problem solving. Additionally, the work environment is intentionally positioned for learning and innovation (Olsen, 2016). Lundvall and Johnson (1994) suggested that learning processes take place while interacting with others. Furthermore, Lundvall et al. (1992)

characterize this process of communication and information exchange during the day-to-day work activities as interactive learning. Olsen (2016) claims that “much of the literature on innovation builds upon the idea that learning is one of the central drivers of the innovation process” (p.211). Innovation is central to a learning organization as learning is to innovation. It follows that a learning organization is one where employees resolutely seek new insights and learning continually occurs. This learning is understood to occur in formal settings (structured) and predominantly in informal avenues (unstructured) on the job (the workplace environment). The work environment plays a role in employee learning. The work environment must be deliberately created to allow employees free interaction and networking. The culture of the workplace must encourage movement across units for broadened knowledge. The environment must allow employees latitude in decision making. It should support access to formal and networking opportunities within and external of the organization. This environment must encourage and facilitate the process of knowledge acquisition. It does this by integrating opportunities for continued development that comes through learning into its value systems. This environment must create systems and processes that its employees can easily access to innovate (Olsen, 2016). In a learning organization, employees are empowered to learn. In a learning organization, there are facilitative structures in place that empower employees to learn. When employees learn collectively, this is called organizational learning. Therefore, organizational learning occurs in the learning organization.

“Argyris and Schön (1978) did not attempt to define a learning organization, they, instead, posed the question, ‘what is an organization that it may learn?’” (Jarvis et al., 2003, p. 149). Furthermore, Jarvis et al. (2003) share Argyris and Schön’s (1978) caution that:

Organizations do not literally remember, think or learn', and suggest that 'organizational learning might be understood as the testing and restructuring of organizational theories of action'. By 'theory of action' they mean a set of principles aimed at making events come about. (p. 150)

I pose a similar question as Argyris and Schön (1978) did, "how can organizations keep learning?" This research study explores this concept in the learning organization.

Employee/Adult Learning in Non-School Contexts

According to Maslow's (1998) studies of workplaces, all workers want to learn and self-actualize despite persisting barriers. The Center for American Progress (CAP) calls for an approach to adult learning that "unites different learning pathways (strategies) instead of enshrining their differences" (Damico, 2011, p.16). "Learning strategies are ways that people acquire new knowledge, skills and attitudes" (Crouse et al., 2011, p. 41). This applies to adults and children alike in any context. I believe it is imperative to present how adults learn in non-school contexts, one being the workplace. When the learning space is the government workplace, the learners are inherently adults since, by law, employees must be 18 years or greater.

Damico (2011) describes one of the defining characteristics of adult learners as the wealth of experience and lessons learned they have. She explains that documenting, understanding, and connecting what adults have learned across a range of settings and experiences can strengthen their awareness of past learning experiences. This practice builds their confidence as learners and increases the likelihood of continued learning. Her position aligns with John Dewey's (1938) argument from his classic volume, *Experience and Education*, in which he claimed that "all genuine education comes about through experience" (p. 13). Smith (2011) conducted a case study on the experiences of twelve teachers in a Career Development

Program (CDP) to understand perceptions of facilitated learning in a non-school setting. Her findings were grouped into three dominant themes: Firstly, if empowered, learners develop themselves on levels beyond their preconceived potential and often surprise themselves by their accomplishments. Secondly, leaders (facilitators/educators/teachers) must be attentive to their participants' affective domain to serve as learning catalysts. This means the authority figures in this space must be sensitive to their learners' emotional needs during the learning transaction. Thirdly, adventurous learning superseded book learning in an industrial workplace learning program. She claims that "instruction must blend real experience (adventurous learning) with academic learning while simultaneously and skillfully merging their prescriptions for learning with participants' felt needs" (p.22). This means the learning transaction must be fluid and adaptive enough to engage all learners. It reifies Dewey's stance regarding experience as a precondition for sustained learning. Similarly, the current study examined employees' perceptions and learning experiences in a non-school setting (the workplace). Like Smith (2011), the findings overwhelmingly demonstrated relevance of the leaders' role as a learning catalyst.

Crouse et al. (2011) identified over thirty employee learning strategies, ways in which adult learners acquire new knowledge, skills, and attitudes in the workplace. It is important to consider this if the learning transaction is to be fluid and adaptive enough to engage all learners. They summarized them into nine broader groups based on observed commonalities (p. 42): (1) Taking courses and programs; (2) doing work/new tasks; (3) working with others; (4) E-learning; (5) observing others; (6) trial and error; (7) reading/researching; (8) reflecting on action; and (9) feedback/replication/vision. These nine strategies fall under formal or informal learning which is one of the research areas I discuss. Similarly, their research identified forty-five learning barriers which they grouped into these nine categories (p. 43): (1) Resource constraints; (2) lack of

access; (3) technological constraints; (4) personal constraints; (5) interpersonal constraints; (6) structural and cultural constraints, for example, (i) no management commitment to learning and (ii) a culture that does not support learning; (7) course/learning content and delivery (8) power relationships, for example, (i) limited decision-making power in organizational affairs and (ii) excluding people from learning opportunities; and (9) change. I particularly provided examples for (6) and (8) above as they have relevance for this study's focus and findings. Some questions in the DLOQ instrument measured employees' perceptions of the facilitative structures in place to enable learning. Additionally, the interviews examined employees' experiences to understand what contributed to their learning.

Wuestewald (2016) reiterates that learning modalities for adults (employees) must be diverse, interactive, and flexible. He claims that Dewey's learning by doing model laid the foundation for several experiential learning paradigms. These paradigms include problem-based learning, simulations, action learning, social and team-based learning, learning communities & networks, reflective learning, and service learning. Of these, he highlights problem-based learning, which approximates real-world problem solving and stimulates critical thinking (Brown et al., 2011; Hall & Ko, 2014) and improves transfer of learning to actual workplace performance (Austin et al., 2006). Wuestewald (2016) affirms claims from other researchers (Cross, 2007; Williamson, 2013) that "learning is becoming thoroughly self-directed through the available mass of networks, media, and digital data, while knowledge is becoming increasingly cybernetic, applied, and informal" (p.73). Additionally, he suggests that Employee Development Programs (EDPs) have moved toward more humanist, adult-oriented, and experiential learning strategies. Humanist learning philosophy stresses the affective, self-directed, and experiential nature of learning as a process of self-discovery and self-actualization (Merriam et al., 2006; Rogers,

1969). Adult learning is a product of this humanist orientation. Compared with preadult students, “adults bring experiential knowledge, are prepared to learn based on a self-recognized need, are highly task- and goal-oriented, and have internal and external learning motivations. These attributes offer learning opportunities that can fundamentally change learning dynamics (Wuestewald, 2016, p.71). In examining employees’ individual learning experiences in this state government agency, I examined how adults learn. I asked open-ended questions during the interview exchange to afford employees the opportunity to describe instrumental workplace learning strategies.

Workplace learning and workplace culture

Jarvis (2014) explained the 1990s paradigm shift from the concept of education to learning for adult learners:

Using the term ‘learning’ rather than ‘education’ meant that there were other sites for learning than educational institutions – the workplace became the most frequently recognized. Education is fundamentally an institutional phenomenon offering learning opportunities to people throughout their lives, as continuing education. In practice, the adult learning was of a recurrent nature. (pp 52-53)

This shift in thinking situates the workplace as the setting for adult learning. As such, workplace learning is a form of adult learning. Rowden (2007) defines workplace learning as the process of acquiring job-related knowledge and skills, through both formal training programs and informal social interactions among employees. Yoonhee and Ronald (2011) explain that this captures the various ways employees acquire new job-related information regardless of the term used in the workplace, from training to employee development. They claim that organizations have invested extensive financial resources in their employees’ learning activities, believing that

the investment in the learning will result in useful outcomes. Furthermore, workplace learning is described as a means of addressing employee development designed to enhance individual and organizational performance. It is also described as an individual process designed to achieve learning toward the attainment of personal and professional goals (Woojae & Ronald, 2011).

Choi and Jacobs (2011) presented a conceptual model that subdivided workplace learning into formal, informal, and incidental learning. Formal learning entails planned and structured educative events. In contrast, informal learning is not intentionally structured and occurs when individuals' make sense of the experiences they encounter during their work. Incidental learning was described as an unintended byproduct of informal learning activities. Using this model, participation in formal learning may be viewed as concurrently promoting employees' opportunities for informal and incidental learning in the workplace. They argue that all types of workplace learning likely includes attributes of both formality and informality with the specific situation determining the degree of each component. According to Crouse et al. (2011), workplace learning is "a process whereby people, as a function of completing their organizational tasks and roles, acquire knowledge, skills, and attitudes that enhance individual and organizational performance" (p. 41). It presents the notion that workplace learning is broader than education and training alone and is related to performance. Furthermore, Crouse et al. (2011), claim that:

Although much of the learning in organizations occurs informally (Doyle & Young 2007; Zemke 1985), both formal and informal learning are important. Given that workplace learning is complex and goes beyond formal learning strategies to include informal strategies (Matthews, 1999), it is a useful lens through which to view the learning of people in organizations. (p. 41)

Eraut (2004) focused on the workplace learning of professionals, technicians, and managers. He found that most times much of the learning in the workplace was informal. He described this as a combination of learning from other people and learning from personal experience. Deploring dichotomies in characterization, he defines informal learning as “learning that comes closer to the informal end than the formal end of a continuum” (p. 250). In this model, characteristics of the informal end include implicit, unintended, opportunistic, and unstructured learning in the absence of an instructor. The formal end includes activities like the facilitation of a teacher. Coaching and mentoring-type relationships fit somewhere in the middle of this continuum. In consideration of the interview findings, mentoring and coaching will be addressed in further detail in this review. Eraut’s (2004) findings demonstrated that a high proportion of the learning happened when individuals were participating in group activities towards a common outcome; working alongside others; undertaking difficult tasks which requires on-the-job learning and; and working with clients (customers, not co-workers). Similarly, Olsen (2016) highlights the clear relationship between formal and informal learning in workplace learning. She describes learning organizations as workplaces which provide opportunities for discussion and questions, a broad range of tasks, and opportunities to plan future learning prospects. These broad range of tasks enable employees compare past learning experiences with current ones. Many workplace learning scholars claim that mainstream conceptualizations of learning in the school context are not transferable to the workplace (P’avi Tynj’al’a, 2008). Hager (2004) distinguishes between the standard paradigm of learning and the emerging paradigm of learning. The standard paradigm (in schools and traditional educational settings) considers the most important aspect of learning to be focused on a shift in thinking rather than action. In contrast, the emerging paradigm characterizes learning as action in the

world where learning does not only bring about change in the learner's mind but also in her environment. Regardless, Eraut (2004) argues that formal education can also be viewed as a workplace concept. He claims that 'work' is prominent and common to both schools and workplaces. He supports his argument by explaining that in the school settings, it is usually the work that is structured and not the learning. It follows that in the workplace, he considers the work less structured and the learning equally as unstructured. Therefore, given the assumed differences between school and workplace learning, it is necessary that research on workplace learning is approached differently from the school environment. As enhanced workplace learning may improve employee satisfaction, retention, productivity, and organizational performance, it is beneficial to address its significance in a holistic way (Eraut, 2004). Table 3 presents some differences between formal and informal learning.

According to Merriam et al. (2006 as cited in Wuestewald, 2016):

The cognitive learning model assumes optimal learning occurs when information is logically presented in a preplanned sequence of modules, whereby information can be assimilated into the learner's preexisting mental framework. Cognitive learning is marked by an orderly, linear progression of subject matter leading to mastery of a body of knowledge. (p. 70)

This is otherwise known as formal learning. "Learning takes place in organizations through formal and informal means" (Crouse et al., 2011, p. 41). Here is Eraut's (2004) apt illustration of the relationship between formal and informal learning:

Learning is a continuum with formal learning at one end and informal learning at the other. Formal learning leads to formal qualifications, typically obtained in educational

establishments. Informal learning is a combination of learning from other people and learning from personal experience, often both together. (p. 248)

Table 3

Differences between formal and informal learning

Formal learning (for example, in schools)	Informal learning (for example, in the workplace)
Intentional (+unintentional)	Unintentional (+intentional)
Prescribed by formal curriculum, competency standards, etc.	Usually no formal curriculum or prescribed outcomes
Uncontextualized - characterized by symbol manipulation	Contextual, characterized by contextual reasoning.
Focused on mental activities	Focused on tool use + mental activities
Produces explicit knowledge and generalized skills	Produces implicit knowledge and situation-specific competences.
Emphasis on teaching and content of teaching	Emphasis on work and experiences based on learner as a worker.
Individual	Collaborative
Theory and practice traditionally separated	Seamless know-how, practical wisdom
Learning outcomes predictable	Learning outcomes less predictable
Separation of knowledge and skills	Competences treated holistically, no distinction between knowledge and skills.

Note. Table 3 highlights the fundamental differences between formal learning (in this context, learning in traditional school settings) and informal learning in the workplace. It was adapted from (adapted from P`aivi Tynj`al`a, 2008)

Olsen (2016) discovered from her research study of four private organizations that “much of the learning which improves the competitive position of the firm is informal and often

unplanned” (p.223). Her research also illustrated the importance of collaborating with people from other disciplines or firms to learn. She used the terms ‘networking’ and ‘mobility’ in referring to initiatives that stimulate exchange of ideas and provide employees opportunities to experience differing work environments and cultures. This finding is corroborated by findings from Crouse et al.’s (2011) study of thirteen human resource professionals which examined workplace learning facilitators. They found that the strongest facilitator of learning in the workplace, described by nine of the thirteen participants, was learning with and from others - informal learning. This was exemplified in practices like interactions with others in the profession and modeling desirable behaviors in more experienced staff. This study also identified another strong facilitator of workplace learning as organizational and managerial support. Some participants provided specific applications such as a supervisor’s ‘willingness to invest in training’ (p. 50). This aspect has strong relevance to the leadership role in employee learning which is discussed later.

Olsen’s (2016) research demonstrated that human resources was involved to some extent in formal training opportunities designed to develop personal abilities and build networks. These organizations contracted outside vendors to provide formal specialized training on subject-matter themes. The employees in these organizations were highly educated individuals with access to formal vocational training. They were responsible for developing their own plans and taking their own decisions. Furthermore, they functioned in highly organized interactive project teams in the workplace. Despite these attributes, they acknowledged that most of the learning during their careers occurred unintentionally while working. Although they recognized the importance of formal learning, they elevated the place of informal learning experiences that happened in the day-to-day interactions with colleagues. Therefore, Olsen’s study found that employees

considered every situation a learning opportunity even when it was not planned. She advocates for work environments that are sensitive to this informal nature of learning. This will empower employees to harness learning situations. The current study examined employees' learning experiences with the understanding that it could take varying forms as suggested by Olsen's findings.

Yoonie and Ronald (2011) investigated the relationship between workplace learning, including both formal and informal learning, and organizational performance. Their study examined the influence of investment in workplace learning on learning outcomes and organizational performance. They found that investment in workplace learning influenced organizational performance through the outcomes of workplace learning. As earlier mentioned, prior research revealed that most learning in the workplace is informal. It involves a combination of learning from other people and learning from personal experience. This implies that organizations must encourage formal and informal modes of learning in the workplace. One workplace learning technique that effectively integrates elements of formal and informal learning in practice is Cross-Disciplinary Team Learning (CDTL). CDTL is the ability to work as an engaged member of a project team comprised of people from different disciplines. Woojae and Ronald (2011) suggested that competence in the workplace is not dependent on either formal or informal learning exclusively. Rather, it is dependent on an integration of knowledge gained through formal learning and practical knowledge obtained through informal learning. The current study sought to understand how employees experienced learning. Consequently, the questions were framed to allow exhaustive story telling. While employees may not have used terms like formal or informal learning, they described different learning scenarios in the workplace that illustrated both categories.

Mentoring and Coaching

Parker et al. (2018) discuss the emerging concept of relational learning, of which mentoring and coaching are two unique and distinct types. Relational learning can be described as the outcome of people forming “collaborative relationships to support their personal and professional development to promote organizational learning and change more effectively” (Parker et al. 2018, p. 2). Bradford et al (2017) conducted a research study that investigated the effect mentoring, coaching, and training had on learning outcomes. Their study evaluated the effect knowledge tools such as mentoring and coaching have beyond that of training as mechanisms for improving post-training skills application. They found that mentoring has a positive effect on and increases personal learning. They explain that in interacting with internal mentors, protégés observe and mimic the work behavior of their mentors in similar work settings and increase their personal learning. While they did not find a significant relationship between coaching and personal learning, they conjecture this to be due to the lack of managerial/supervisory support. Their findings suggest that organizations should invest in other learning tools beyond the customary traditional training for employee development (Bradford et al., 2017, pp. 143 – 144).

Another study by Ladyshevsky & Taplin (2018) that explored the impacts of managerial coaching on work engagement found a positive influence of managerial coaching on employee work engagement. Their claim that organizations who invest in the development of coaching skills of managers enhance the organizational learning culture, and thereby the work engagement of employees, is validated by Bradford et al.’s (2017) findings.

Bradford et al (2017) explained that the most successful organizations spend significant revenue on developing their employees to keep up with rapidly evolving markets to survive the

pressures of a dynamic business environment. They stated that managerial support, such as coaching; and peer support, such as mentoring; have consistently been thought to positively influence employee learning and performance outcomes (pp. 133 – 134). Haggard et al. (2011) define mentoring as an:

Interpersonal exchange between a senior experienced person (mentor) and a less experienced junior person (protégé) in which the mentor provides support, direction, and feedback regarding career plans and personal development. These mentoring relationships involve frequent interaction between the mentor and the protégé with a goal of enhancing the protégé's competencies and aiding in his/her career advancement. (as cited in Bradford et al., 2017, p. 135)

Following are four different definitions of coaching that share similarities around performance expectations and goals. Fournies (1987) defined coaching as a “process of improving performance by focusing on correcting problems with the work being done” (as cited in Bradford et al., 2017, p. 136). Burdett (1998) defined it as a “process of empowering employees to exceed established performance levels” (as cited in Bradford et al., 2017, p. 136). Richardson (2009) defined coaching as “the practice of teaching an employee about the rules, goals, and politics of the organization” (as cited in Bradford et al., 2017, p. 136). Hill et al. (1989) explain that “coaching helps the learner personalize the teaching material and make links from theory to practice... [to deal with] ... real work challenges the individual learner might face” (as cited in Bradford et al., 2017, p. 136). In drawing distinctions between mentoring and coaching given the different perspectives, Bradford et al. (2017) claim that mentoring is generally considered relational while coaching is functional. In other words, mentoring is thought to involve a developmental relationship between parties while coaching occurs to

maintain the organization's existing performance structures. Managers tend to coach their subordinates as a matter of workplace expectations and obligations. This obligatory relationship elucidates how a coach may not necessarily mentor the employee even though a mentor may coach the employee during the mentoring process.

Parker et al. (2018) have another orientation of mentoring and coaching. They do not attempt to make a clear demarcation between mentoring and coaching but rather focus on the relational aspects of both. They define peer coaching as “a focused relationship between individuals of equal status who support each other's personal and professional development goals” (Parker et al., 2018, p. 2). They claim that the peer coaching process creates a partnership between employees so they can continuously learn more rapidly and efficiently. In practice, employees move from individual learning to relational learning, a shift in focus from “you and me” to “we”, and both individuals and their organizations' benefit.

The current study did not establish a distinction between mentoring and coaching but explored their usefulness in enhancing employee learning in the workplace. Extant literature recommends both mentoring and coaching as effective learning and knowledge transference tools for individual, group, and organizational learning.

Human Resource Development (HRD)

According to Wuestewald (2016), “challenges wrought by a global economy and a digital revolution have elevated the need for softer human resource skills based in teamwork and adaptive leadership” (p.74). This statement suggests that organizations must invest in focused training to instill this skill set in their employees. An organizations' most valuable resource is its employees. As such, investment in its employees is critical to its being a learning organization. A learning organization is not a state, but a continuum. A learning organization is not static, but

dynamic. A learning organization is always growing. It is constantly learning. This is evident by the innovation component of such an organization. As a learning organization is comprised of employees, it stands to follow that the learning organization cannot be described independent of them, the human resources. The innovativeness of an organization is reflected in its employees. Accordingly, the organization must continually invest in their development.

Olsen's (2016) study acknowledged the relationship among learning, competence development, and a learning organization. Some participants described company strategy that encouraged innovation. Others highlighted employee qualities that contributed to innovation as "people who had excellent formal education, but who had also worked in several different locations within the firm, preferably with different cultures" (p.220). Additionally, employees in a learning organization are people who can efficiently implement change. They develop and leverage relationships with others within and outside of their organization to accomplish this. These characteristics describe desirable traits in the people, the human resources of an organization. However, these values cannot be operationalized without the facilitative structures that allow employees to operate with the latitude described.

The Association for Talent Development (ATD) estimated U.S. companies spent \$156 billion on human resource (HR) training in 2011 (Miller, 2012). More than half this total (56%) was spent internally, while less than half (44%) was spent for external training and tuition reimbursement. Programs that targeted organizational leaders comprised a significant portion of this investment. Although investment in human capital at all levels is important in a globalized economy, senior executive training is the critical cornerstone to corporate strategy, coordination of effort, crises management, and change capacity (Brotherton, 2011; Conger & Xin, 2000; Crotty & Soule, 1997 as cited in Wuestewald, 2016, pp. 69-70). The corporate strategy and

coordination of effort suggests collective learning, organizational learning. As previously mentioned, prior research claims that organizational learning occurs in a learning organization. The two cannot be separated, they go together. Therefore, as senior executive training is the critical cornerstone for organizational learning, leadership matters. Stated differently, the people in leadership positions can make or break the organization. One person can completely derail an organization. One person can totally implode a nation. A learning organization cannot be attained in the absence of transformative leadership. The leadership of an organization is critical to its being a learning organization. The current study examined employees' perceptions and experiences of learning on the individual, team, and organizational levels in the workplace. I placed particular emphasis on how individual employees experienced learning with the understanding they are the bedrock of the organization. Human resources, the employees, are the most valued asset of a learning organization.

Leadership Role in Employee Learning

I have presented evidence on the importance of informal learning in the workplace. To ensure informal learning opportunities are maximized in the workplace, Eraut (2004) beckons educators to give equal attention to learning supports, work allocations, and a favorable environment as is given motivation, productivity, and appraisal. Learning Supports and a favorable environment refer to the facilitative structures that are critical for a learning organization. These facilitative structures can be influenced by the leadership in the workplace:

Although cognitive teaching methods attained through formal learning may be effective with regard to functional knowledge, they may be less effective for grooming social-behavioral skills, the soft skills of communication, emotional intelligence, team building, collaborative

problem solving, and transformative leadership which are essential for effective leadership in an organization. (Daniels & Preziosi, 2010 as cited in Wuestewald, 2016, p. 71)

Hetland et al. (2011) conducted a study of the Norwegian postal service, a government entity, to examine the relationship between two leadership styles and learning climate. They examined sufficient time to learn and perform (time), autonomy and responsibility (autonomy), team style, opportunities to develop, and guidelines on how to do the job (guidelines) as features of the learning climate. They characterized transformational leadership as leaders who inspire, motivate, support, and intellectually stimulate subordinates. The other leadership style, passive-avoidant, was characterized as leadership where leaders avoided their responsibility or exhibited complete absence of constructive leader behavior. Their research found significant positive paths between transformational leadership and all learning climate features except time. Their research also revealed significant negative associations between passive-avoidant leadership and time, team style, and guidelines. This demonstrates the influence of leadership on perceptions of the learning culture. Their research affirmed that “individuals’ perception of the work climate is important for creativity, learning, and performance” and that “it is crucial that the context or climate for learning is supportive, open, and embraces new, critical, and unconventional ways of thinking for learning to occur in the workplace” (Hetland et al., 2011, p. 163).

Choi and Jacobs (2011) conducted a cross-sectional study that examined the influences of formal learning, personal learning orientation, and supportive learning environment on informal learning. Supportive learning environment measures the extent to which an organization provides an environment conducive to continuous learning. This reference to ‘an organization’ is indicative of the leadership. The organization providing a conducive environment refers to the power structures, the people in positions of authority to effect change. In essence, a supportive

learning environment measures the extent to which ‘the leadership’ provides an environment conducive to continuous learning. Results of their study demonstrated that a supportive learning environment influenced informal learning. So, the leadership of an organization influence informal learning. As earlier discussed, most workplace learning is unstructured, it happens informally. This finding reintroduces the role of the organizational leadership in fostering supportive learning environments in the workplace to induce employee learning.

Abbasi and Zamani-Miandashti (2013) performed a study to examine the role of transformational leadership, organizational culture, and organizational learning on faculty performance. The research population consisted of all 1,726 faculty members of public agricultural faculties affiliated with Iran’s Ministry of Science, Research and Technology (MSRT). The research objective was to improve performance and lead the ministry to become a learning organization. Transformational leadership was characterized as the ability of leaders to provide meaning and context to the work of those under them. Learning organizational culture was the extent to which people accepted new methods and were not resistant to changes. Organizational learning was the extent to which the faculty members created and achieved new knowledge. Lastly, performance was the extent to which the faculty could improve education & research activities and respond to the internal & external needs of the ministry. Their findings demonstrated a positive significant relationship between transformational leadership and organizational learning culture. Hetland et al.’s (2011) study characterizes transformational leadership as leaders who inspire, motivate, support, and intellectually stimulate subordinates. This finding signifies that the transformational leader creates and fosters the culture of learning in the organization. There was also a positive significant relationship between organizational learning culture and organizational learning. According to Argyris and Schons (1978).

organizational learning denotes collective learning experiences used to acquire knowledge and develop skills. It is where learning is viewed as applications of knowledge at different levels across the organization. It occurs when members of the organization act as learning agents of the organization. This finding signifies that when the transformational leader fosters a conducive learning culture, organizational learning occurs. Indeed, organizational learning happens in a learning organization. We can assume that when employees learn individually and collectively, organizational learning happens. The right leader fosters an environment where employees are empowered to learn individually and collectively.

Abbasi and Zamani-Miandashti (2013) also found a positive significant relationship between transformational leadership and organizational learning. This relationship is supported by the influence the leader has on the workplace learning culture to promote or hinder learning events. Finally, there was a positive significant relationship between organizational learning and performance. When organizational learning occurs, the members of the organization (employees, faculty, students etc.) acquire knowledge and develop skills. With this increased knowledge comes improved performance. Abbasi and Zamani-Miandashti's study underscored the role of transformational leadership on organizational learning culture and organizational learning. As earlier stated, organizational learning happens in the learning organization. When employees synergize in groups or teams for a common goal, organizational learning happens. When organizational learning consistently occurs, the organization is innovative. When innovation happens, the establishment can be called a learning organization. A learning organization innovates. Innovation happens when employees apply their learning and create new ideas. A learning organization recognizes its most valued assets are its human resources, the employees. Therefore, a learning organization intentionally invests in employee learning, growth, and

development. A learning organization cannot be realized in the absence of transformational leadership.

The current study examined employees' perceptions of learning on the organizational level. Items in the questionnaire examined how employees perceived their connection to the organization and its environment. The interview exchange also sought to understand how employees experienced learning collectively. I was therefore interested in how employees described learning in the workplace as individuals, in their teams, and as part of the organization beyond their teams. Given their experiences, what recommendations would they offer for improving learning in this Georgia state government agency.

Summary of Literature Review

As demonstrated in the preceding review, there is no clear limit of scope among the domains which comprise the learning organization. The learning organization encompasses: (a) organizational learning; (b) adult learning in non-school contexts; (c) workplace learning; (d) formal and informal learning in the workplace; (e) Human Resource Development (HRD); (f) and leadership, among other domains. The influence and scope of each are interconnected. These domains overlap. The employees perceive and communicate their experiences holistically. They do not compartmentalize them by domain. The literature review demonstrates the intersectionality of the learning organization's core contributors and their influence on the employees' learning. The current study therefore chose to examine employees' perceptions of the learning organization and their learning experiences in a Georgia state government agency

Methodology

Chapter 3 describes the methodology that guides this study. Methodology is a “social science discourse (a way of acting, thinking, and speaking) that occupies a middle ground between discussions of method (procedures, techniques) and a discussion of issues in the social sciences” (Schwandt, 2015, p. 161). The purpose of this concurrent mixed methods study was to examine employees’ learning experiences and perceptions in a selected state of Georgia government agency. The study sought to understand the lived learning experiences of employees in the workplace. It compared employees’ perceptions of the learning organization's dimensions based on employees’ management level and tenure (length of employment). The research questions that framed the study were:

1. How do employees navigate learning individually, in teams, and organizationally in this Georgia state government agency?
2. How do employees’ perceptions of the learning organization compare based on tenure and management level?

Research Design Overview

The conceptual framework that contributed to the design of this concurrent mixed methods study incorporated adult learning theories, social cognitive learning theory, and pragmatism. Therefore, I will discuss these various parts of the design and their link to the study. Moreover, this chapter also focuses specifically on the mixed methods design. It includes the participants, data collection methods and analysis, and the ethical issues dealt with in the process.

Epistemology

Epistemology refers to how knowledge is acquired. It examines the process of how we come to know and understand. This knowledge acquisition process informs how we make meaning of events. This means our epistemology informs our theoretical perspective, the lens by which we analyze information. “The term ‘epistemology’ goes back to the ancient Greek words *episteme* (knowledge) and *logos* (account). An account – a theory, an understanding, a grasp – of knowledge” (Hetherington, 2012, p. 2). A widely known epistemology is objectivism/positivism, which fundamentally claims a singular truth needs to be uncovered through scientific methods. Constructionism/constructivism, on the other hand, claims that truth is a construction of a social being in her environment, and meaning is not independent of the social context of the individual. Positivism is primarily associated with quantitative approaches of inquiry, while constructionism is associated mainly with qualitative methods. The epistemology that undergirds the current study is Dewey’s pragmatism. Dewey’s view of knowledge is about reflection and action. The reflective transformation of experience is understood as transactional (Biesta & Burbles, 2003). John Dewey (1929a) said, “we do not have to go to knowledge to obtain an exclusive hold on reality. The world as we experience it is the real world” (p.235). Pragmatism as an epistemology seeks to employ all approaches relevant to the individual's experience. It does not consider an either/or dichotomy in examining a phenomenon but an exhaustive one:

The main significance of Dewey’s pragmatism...lies in the fact that it provides a different account of knowledge and a different understanding of the way in which human beings can acquire knowledge. Dewey’s approach is different in that he deals with questions of...the acquisition of knowledge within the framework of action...as its most basic category. (Biesta and Burbles, 2003, p. 9)

Crotty (1998) aligns with Dewey's position. He states that "if we seek to be consistently objectivist, we will distinguish scientifically established objective meanings from subjective meanings that people hold in everyday fashion and at best 'reflect' or 'mirror' or 'approximate' objective meanings to them" (p. 15). He claims that this makes people's everyday understandings inferior to more scientific understandings epistemologically. He then goes on to add that "If we seek to be consistently constructionist, we will put all understandings, scientific and non-scientific alike, on the very same footing. Scientific knowledge will be considered as just a particular form of constructed knowledge designed to serve particular purposes" (p. 16). In this case, all information will be considered as constructions. He explains that in this paradigm, no information will be considered objective, absolute, or truly generalizable.

An integration of the constructivist and objectivist epistemologies is brought to bear in Dewey's pragmatism. In this paradigm, "knowing – the acquisition of knowledge – is not something that happens somewhere deep inside the human mind" (Biesta & Burbles, 2003, p. 46). He claims that knowing itself is an activity, "literally something which we do" (Dewey 1916b, p. 367). This means that to get knowledge, we need action. However, action is not a sufficient condition for knowledge. "To acquire knowledge, the individual needs to pair action with reflection" (Biesta & Burbles 2003, p. 46). Dewey claimed that this combination of reflection and action leads to knowledge. Grbich (2013) describes pragmatism as a mix of post-positivism and social constructivism, a leaning toward postmodernism. She argues that pragmatism underscores empirical knowledge, action, triangulation, and the changing interaction between the organism and its environments. She elaborates that the approach "follows postmodernism's appeal to cross barriers and to break down boundaries, thereby, resulting in pragmatism" (p.9). Furthermore, she describes a mixed/multiple-methods paradigm as one that

“uses the best set of tools for the job” (p.5). I considered a mixed-methods study best suited to examine employees’ perceptions of a learning organization and their experiences in this state of Georgia government agency. The concurrent mixed methods design allowed me to explore aggregated and individual employee data. It also enabled me to compare insights that emerged from the questionnaire and interviews. I found that insights from one study strand complemented and explained those gleaned in the other strand. Using Dewey’s pragmatic epistemological paradigm, I utilized multiple tools to examine employee experiences and perceptions. Whether they are qualitative or quantitative, the best tools for the job would entail all methods that critically examined employee experiences and perceptions within the framework of action.

Learning Theories

Theory explains how a phenomenon occurs and suggests how this translates into practice. Therefore, learning theories explain what happens when learning takes place. Adult educators vary in their classifications of learning theory. Five theoretical perspectives that offer different explanations of learning and have ready applications for adult learning are presented in order of emergence below (Merriam et al., 2007, 2013).

Behaviorism considers learning as a change in behavior. The Russian psychologist Ivan Pavlov discovered and summarized that when behavior is reinforced or rewarded, it is likely to continue; if it is not reinforced, it is likely to disappear. Thus, what one learns is a response to stimuli arranged in the environment to bring about learning. Humanism frames learning as the development of the person. This presents learning as “a more self-directed model, lodged in a humanistic worldview” (Merriam et al., 2013, p. 29). It evolved as a contrast to the impersonal nature of learning that alienated the learner and elevated the teacher by giving him singular control of the learning environment. Cognitivism presents learning as a mental process. “This

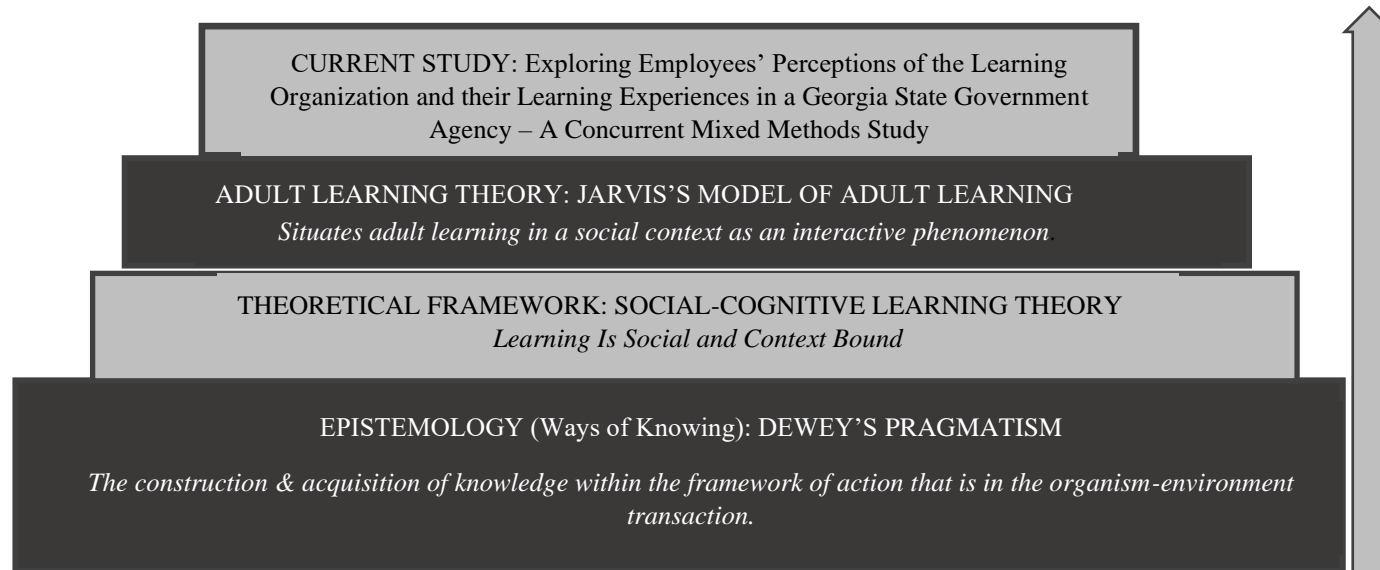
theory represented a shift in the locus of learning from the environment (behaviorists), or the whole person (humanists), to the learner's mental processes" (Merriam et al., 2013, p. 31).

Constructivism presents learning as creating meaning from experience. Constructivism is less a single theory of learning than a collection of perspectives, all of which share the common assumption that learning is how people make sense of their experience. It theorizes that learning is the construction of meaning from experience. Social Cognitive Theory presents learning as social and context bound. It is sometimes included as a subset of cognitive learning theory.

"Social cognitive learning theory highlights the idea that much human learning occurs in a social environment. By observing others, people acquire knowledge, rules, skills, strategies, beliefs, and attitudes." (Schunk, 1996, p. 102). Gibson (2004) suggests that social cognitive theory is relevant to the workplace where on-the-job training and behavior modeling can assist in socializing employees to the workplace (as cited in Merriam et al., 2013, p. 35-36). As the current study explored employees'(adults) learning perceptions and experiences in the workplace, I studied this phenomenon using an adult learning theory with strong underpinnings in social cognitive theory.

Figure 1

Conceptual Framework for the Current Study



Note. This model depicts the relationship between the epistemology and theoretical framework for the current study, which explores employees' perceptions of the learning organization and their learning experiences.

Jarvis' Model of Adult Learning

Jarvis' adult learning model originated in research with over two hundred adult learners. It was repeatedly revised as he gained a better understanding of adult and human learning. Jarvis' model draws from a wide philosophical base as well as psychology and sociology (Merriam et al., 2007). It holds strong relevance because it situates learning in a social context as an interactive phenomenon rather than an isolated internal process. His early work on the model was based on adult learners' research, which aligns with the current study. Jarvis expanded his inquiry to explore human learning and not just adult learning. However, he maintains that his model is easier to apply when speaking of adults since young children's cognitive skills, emotional range, or action alternatives are not as advanced. Moreover, he highlights the critical role of experience in the learning process.

Jarvis's (2010) model of learning begins with an adult's experience. He claims that all learning begins with experience. Jarvis elaborates by introducing the term 'disjuncture,' which he uses to describe the learning process' start. A disjuncture happens when a disconnect exists between what a person knows and is comfortable handling and a new task (or experience) that she is unprepared to handle.

Disjuncture occurs when our biographical repertoire is no longer sufficient to cope automatically with our situation so that our unthinking harmony with our world is disturbed to some degree or other. No longer can previous learning cope with the present situation, people are consciously aware that they do not know how to act. We must think, to plan or to learn something new. Learning then always begins with experiencing. (Jarvis, 2004, p. 93; 2006, p. 9)

Therefore, Jarvis submits that learning is borne out of this uncomfortable condition, the need to convert a series of painfully consciously taken steps in performing a task to one that becomes second nature, performed at the subconscious level.

I started my employment with the State of Georgia in April 2007 and am still employed there as of June 2021. I have worked with three different state agencies in varying roles since my hire. In each position I occupied, I faced the disjuncture Jarvis describes. Although I had the required education, credentials, and some experience, I did not have experience in that space. I had to learn each agency, its uniqueness, variances, specificities, and operational structure. I found that my knowledge may have different applications depending on the setting. The expectations and rules of engagement varied from agency to agency. When assigned a task or assignment, I sometimes did not have full understanding, the skills, or tools to tackle. For fear of being perceived as incompetent, I was sometimes hesitant to ask for assistance. The disjuncture I experienced in my three positions caused emotional uncertainties and sometimes, stress. I experienced feelings of discomfort and was not always sure how to resolve it. Sometimes, I was not certain who to approach to resolve the disjuncture. I handled these disjunctures by thoughtful consideration and reflection on possible courses of action while managing my emotions. I then actively determined to act to resolve the disjuncture. This action sometimes took on the form of consulting a peer for help, doing some personal research and investigation, or attending a training. I sometimes resolved the disjuncture in a day, on other occasions, up to a year. If I did nothing, the disjuncture would remain with any number of consequences. Given my experiences at every agency I have worked with in the state of Georgia, I fully relate to Jarvis' model. I applied it, albeit unknowingly, numerous times. Although, at the time, I may not have

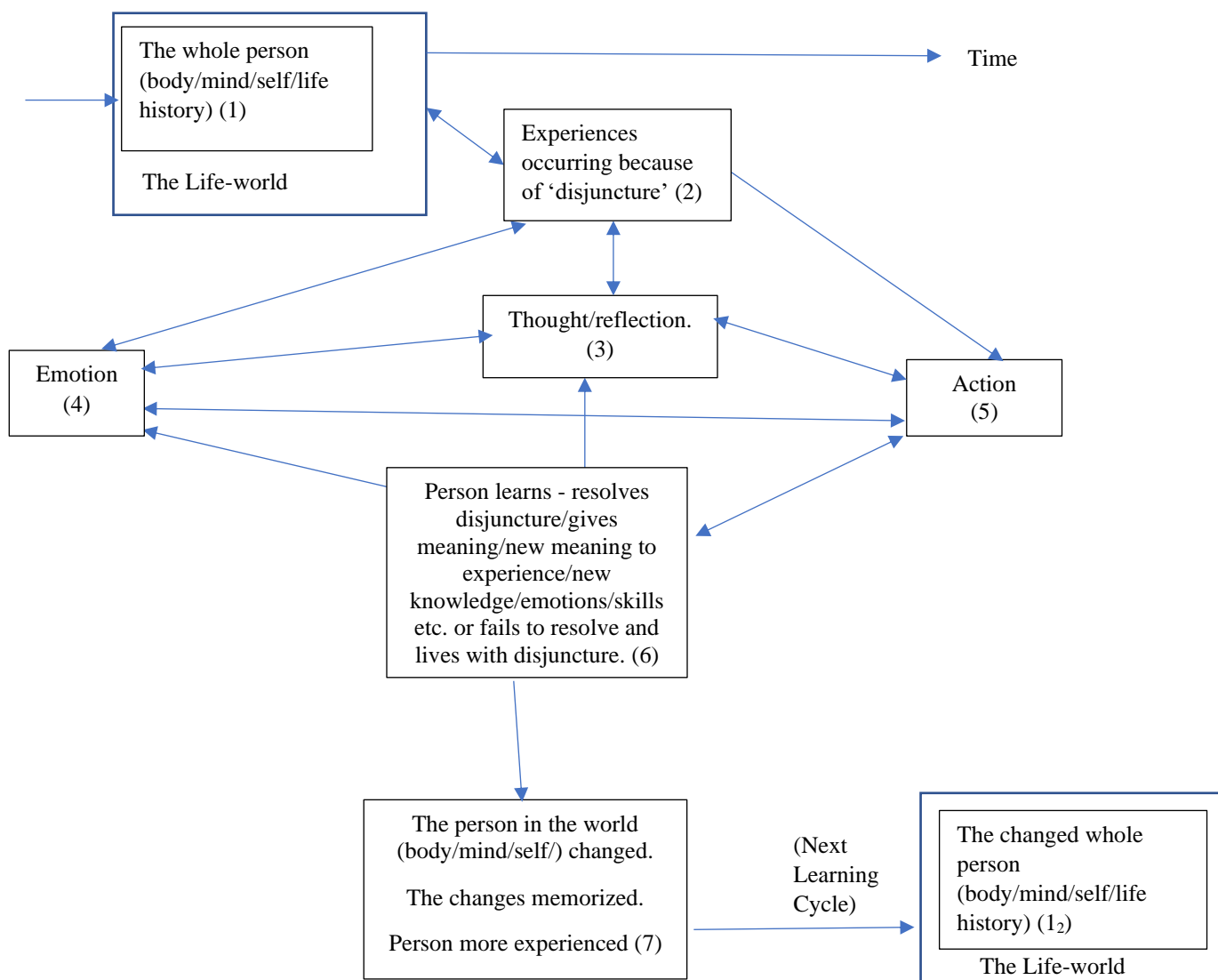
been aware I was modeling Jarvis' framework, my actions were intentional and strategic, resulting from careful thought and reflection, fueled by negative emotions I desperately desired to dominate. I can confidently and truthfully state that while I am still learning and developing, I am more experienced and seasoned than I was in 2007. This growth and development were abetted by the meaningful action I took to resolve the disjunctures I encountered.

Jarvis hypothesizes that all learning begins with the five human sensations of sound, sight, smell, taste, and touch. He believes that biology is a significant factor in the learning process. This is not a gene versus environment argument, but an acknowledgment of how the human senses work to perceive and process external stimuli. "We constantly encounter stimuli, some of them new, and process them until they are transformed into knowledge, skills, attitudes, values, emotions, and so on" (Jarvis, 2006, p. 14). He distinguishes the learners' world from the larger World. This differentiation explicitly validates the individual's experiences as noteworthy and authentic while situating the person's world in the World shared with other authentic beings. He presents the learner's world as dynamic, continually evolving. It is in this world that the learner experiences learning. Jarvis clarifies that changes in the learner's world are a byproduct of changes in the larger World and the learner's involvement in it. The learner's world is not independent of the larger World. This model presents a series of interacting factors all legitimately placing a claim on the learner. The learner's world is not static just as the larger World is not. The nature of learning itself is dynamic. Furthermore, Jarvis situates learning in the social World. The learner is more than a cognitive machine. The learner is a whole person made up of the mind and the body. She comes to a learning situation with herstory (a history). This

history is a “biography that interacts in individual ways with the experience that generates the nature of the learning” (Jarvis, 2006, as cited in Merriam et al., 2007, p. 101).

Figure 2

Jarvis’ Model of the Transformation of the Person Through Learning



Note. This figure was retrieved from Peter Jarvis' 2010 book, *Adult Education and Lifelong Learning: Theory and Practice*. It depicts his conceptualization of the transformation of a person through experience. Source: Jarvis, 2010, p. 81.

Figure 2 depicts Jarvis' conceptualization of the transformation of a person through experience. He demonstrates the cyclical nature of learning by repeating a slightly updated version of the first box as the last, presenting the evolved learner. This individual is a reinvented whole person. The individual is now equipped with newly acquired knowledge, skills, thoughts, and actions in a recreated world and is now ready for the next learning opportunity. Jarvis pointedly acknowledges the complexity of human learning. He admits that he is still growing in understanding. Since his earlier works in the mid-1980's to define and model human learning, he has repeatedly revised its definition and framework. He explains that we may never fully comprehend the human and adult learning process in its entirety. He advocates for sustained critical examination to continually update our understanding (Jarvis, 2010). His more recent definition of human/adult learning which includes elements from other theorists is:

A combination of processes through a lifetime whereby the whole person – body (genetic, physical, and biological) and mind (knowledge, skills, attitudes, values, emotions, meaning, beliefs, and senses) – experiences social situations, the content of which is then transformed cognitively, emotively, or practically (or through any combination) and integrated into the individual person's biography resulting in a continually changing (or more experienced) person. (p.81)

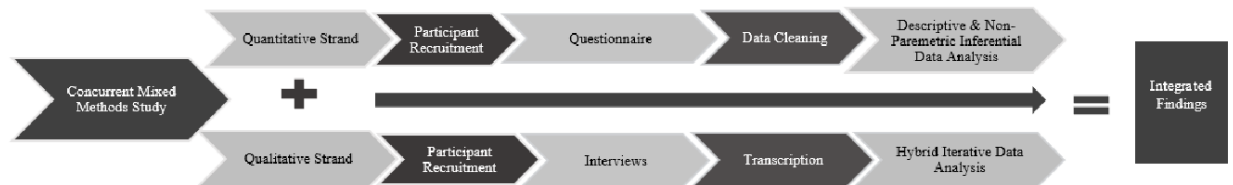
Procedures

The current study employed a Concurrent/Parallel Mixed Methods (MM) Design. Tashakkori and Teddlie (2003a) define Mixed Methods (MM) as “a type of research design in

which Qualitative (QUAL) and Quantitative (QUAN) approaches are used in types of questions, research methods, data collection and analysis procedures, and/or inferences” (p. 711). The study is a two-strand concurrent quantitative and qualitative study (QUAN + QUAL). It used parallel sampling to recruit participants. The notation in parenthesis explains the emphasis and process. The uppercase letters notation demonstrates that I weighted both strands equally. If one strand had carried less weight at any stage of the research study, it would have been notated in lowercase letters. The + sign between the strands signifies the concurrent process of the data collection between the QUAL and QUAN strands as opposed to a sequential study. A concurrent or parallel mixed methods design means data is collected from both strands of the study at about the same time. The data collection processes are independent of each other. In a sequential mixed methods design, the researcher defines the data to be collected in the second strand based on analysis of the data collected in the first strand. This means the second strand data is dependent on the first. However, in a concurrent design, the researcher defines both data requirements concurrently like I did. Creswell et al. (2003) describe the benefit of a concurrent/parallel mixed methods (MM) parallel sampling design. It is “one that permits researchers to triangulate results from the separate QUAN and QUAL components of their research, thereby allowing them to confirm, cross-validate, or corroborate findings within a single study” (as cited in Teddlie & Tashakori, 2009, p. 229). Additionally, Onwuegbuzie and Collins (2007) recommend a concurrent MM research design to “triangulate findings across samples in a population and to ascertain complementarity” (p. 292).

Figure 3

Research Design Concept Map



Note. This figure demonstrates the concurrent research design of the quantitative and qualitative study strands. Participant recruitment, data collection, and data analysis were performed in parallel. The findings from both strands were compared and contrasted for corroboration, triangulation, gap analysis, and integration.

Quantitative (QUAN) Strand/Phase

I used the Dimensions of a Learning Organization Questionnaire (DLOQ) to examine employees' perceptions of learning in their organization. In addition to the questionnaire data, I collected demographic and contextual data to provide descriptive statistics for data analysis (refer to Appendix A for Demographic Questions). Employees' perceptions based on length of employment with the current agency (tenure) and management level were analyzed.

Management, in this context, refers to the management of people, not processes or projects.

There were four management level categories: A non-managerial employee is one who has no direct reports administratively. A mid-level manager is an employee who has direct reports administratively and is the lowest level in the leadership chain of command. A senior-level manager is one who the mid-level managers report to. Finally, executive management/C-level manager is one to whom senior-level managers report to. In state government, executive management/C-level managers are generally commissioners, deputy commissioners, chief

financial officers, and similar roles. Non-managerial employees may oversee projects and teams, but if the teams they work with do not report to them administratively, they are not considered mid-level managers. The tenure (length of employment) categories are: 0 year – 5 years, 6 years – 10 years, 11 years – 15 years, 16 years – 20 years, and over 20 years. I administered the full version of the DLOQ to examine learning perceptions along the seven dimensions and three levels of the learning organization (refer to Tables 1 and 2 on pages 9 -10 for DLOQ information. Also refer to Appendix B for a copy of the DLOQ Instrument).

Qualitative (QUAL) Strand/Phase

Given the concurrent study design, I drafted the interview questions the same time I administered the DLOQ to the employees. The interview questions were structured to complement the DLOQ questions. Prior to the interview exchange, I provided an overview of the research topic to the participants for context and encouraged them to share their own understanding of the concepts examined. (See Appendix C for the interview questions.

I used random purposeful sampling to solicit one interview participant from each management and tenure categories to voluntarily participate. However, I did not interview an employee in the 11 to 15 years tenure category. Onwuegbuzie & Collins (2007) provide recommendations on the minimum number of interview participants to be included in a study as ranging between 6 and 12. They define random purposeful sampling as “selecting random cases from the sampling frame and randomly choosing a desired number of individuals to participate in the study” (p. 285). Five (5) employees voluntarily participated in the interviews. Some of the interview participants satisfied multiple inclusion criteria. I conducted all interviews between

February and April in 2020. All five interview participants also completed the questionnaires creating overlapping sample frames between the QUAL and QUAN strands.

Questionnaire Data Cleaning and Preparation

I prepared the questionnaire data for analysis by deleting extraneous information. Two hundred and four (204) of three hundred and thirty-six (336) respondents completed all questions. One hundred and thirty-two (132) respondents started but did not complete the survey. Of the 132 with responses missing, 103 respondents only completed parts of the demographic and descriptive information (gender, age group, management level etc.) but did not answer any of the 43 DLOQ instrument questions. These 103 records were excluded from the data analysis. Of the 132 with responses missing, 29 respondents completed some of the 43 DLOQ instrument items. Only 6 of the 29 completed questions 1 - 31 (about 72%). None of the 29 respondents completed Q32 - Q43. I chose listwise deletion and excluded all 29 records from the analysis because even for the 6 respondents that completed over 50% of the questions, they were missing all questions from dimensions 6 and 7.

Each of the forty-three (43) DLOQ questions had the same response Likert scale ranging from ‘Almost Never = 1’ to ‘Almost Always = 6’. The numbers 2 through 5 were not explicitly assigned a response label. For example, a respondent’s selection of 4 to the DLOQ question (Q3), “In my organization, people help each other learn” would imply the respondent leaned towards an ‘Almost Always’ response. It is important to note that the meaning and interpretation of each Likert scale response value could vary by respondent. This is due to the ordinal nature of the data and how the questions were coded. Each of the 338 valid questionnaire responses were represented by a row in a spreadsheet and each question’s response was represented by a single

numerical value ranging from 1 to 6 and coded as ordinal measures in SPSS. First, I performed descriptive and frequency analysis of the data using IBM SPSS Statistics Processor version 26 to describe the population. I then computed mean scores for each respondent using the questions associated with the dimensions and levels.

Test for Normality

I performed the Shapiro-Wilks test for normality of the data sample, refer to Table 4. When the significant value of the Shapiro-Wilk statistic was greater than $\alpha = 0.05$, the population was normally distributed on the construct. Conversely, when the significant value of the Shapiro-Wilk statistic was below $\alpha = 0.05$, the population was not normally distributed for a given construct. This means there is a significant difference from the null hypothesis that the data is normally distributed on that specific construct.

Although the data was not normally distributed on the dimensions and levels, the one-way Analysis of Variance (ANOVA) is considered a robust test against the normality assumption. This means that it tolerates violations to its normality assumption rather well. As regards the normality of group data, the one-way ANOVA can tolerate data that is non-normal (skewed or kurtotic distributions) with only a small effect on the Type I error rate.

<https://statistics.laerd.com/statistical-guides/one-way-anova-statistical-guide-2.php>

Table 4*Shapiro-Wilks Test for Normality*

DLOQ Subconstruct	Statistic	df	Sig.
D1 Continuous Learning	.978	202	.003
D2 Inquiry and Dialogue	.968	202	.000
D3 Collaboration and Team Learning	.976	202	.001
D4 Created Systems and Shared Learning	.969	202	.000
D5 Collective Vision	.956	202	.000
D6 Organization Environment Connection	.971	202	.000
D7 Strategic Leadership for Learning	.964	202	.000
L1 Individual Level	.979	202	.004
L2 Team Level	.976	202	.001
L3 Organization Level	.977	202	.002

Data Analysis

To determine the most appropriate statistical test to apply to the dataset, I examined the data to assess compliance with the following ANOVA assumptions.

Assumption #1: The dependent variable is continuous which signifies that it is measured at the interval or ratio level. Likert, or ordinal, variables with five or more categories can often be used

as continuous without any harm to the analysis you plan to use them in (Johnson & Creech, 1983; Norman, 2010; Sullivan & Artino, 2013; Zumbo & Zimmerman, 1993 as cited in <https://www.statisticssolutions.com/can-an-ordinal-likert-scale-be-a-continuous-variable/>).

Although each DLOQ instrument question has six (6) Likert categories and could directly be regarded as an ordinal approximation of a continuous variable, I still calculated each respondent's mean scores for each dimension's and level's ordinal variables across a set of questions. This resulted in a greater number of categories than the ordinal Likert scales they were calculated from. This process created an approximately continuous variable.

Assumption #2: The independent variable consists of two or more categorical, independent groups. This assumption was met with the five tenure/length of employment categories and four management level categories.

Assumption #3: The data must be collected through independent observations. This means that there is no relationship between the observations in each group or between the groups themselves. The study design satisfied this assumption.

Assumption #4: There should be no significant outliers. In addition to observing the histograms of the dependent variables, I used the outlier labeling rule to test this assumption (Hoaglin, Iglewicz & Tukey, 1986; Hoaglin & Iglewicz, 1987; Tukey, 1977 as cited in <https://www.youtube.com/watch?v=bRdC1u9veg8>). I used the upper and lower quartile values to calculate the upper and lower percentile bounds using this formula, Upper = $Q3 + (2.2 * (Q3 - Q1))$ and Lower = $Q1 - (2.2 * (Q3 - Q1))$. The highest extreme value across all dimensions and levels was 6.00. The lowest extreme value across all dimensions and levels was 1.00. The outlier labeling test indicated all outlier scores across all dimensions and levels as those greater than 6 or

less than 1. Therefore, I determined that the highest and lowest extreme values for each dimension and level are within range of the normal distribution for the dataset and no data point is an outlier.

Assumption #5: The dependent variable should be approximately normally distributed for each category of the independent variable. I tested for normality using the Shapiro-Wilk test of normality. Although this assumption was violated, the one-way ANOVA is robust to violations of normality, meaning that assumption can be a little violated and still provide valid results, especially for large sample sizes. <https://statistics.laerd.com/statistical-guides/one-way-anova-statistical-guide-2.php>

Assumption #6: There needs to be homogeneity of variances. I tested this assumption in SPSS Statistics using Levene's test for homogeneity of variances. This assumption was satisfied.

Test for Homogeneity of Variance

Another assumption of the one-way ANOVA is the homogeneity of variances. This means that the population variances in each group are equal. I tested this assumption in SPSS Statistics using Levene's test for homogeneity of variances, see Table 5.

Table 5

Levene's Test for Homogeneity of Variance Based on Mean

	Levene's Statistic	df1	df2	Sig.
Dimension1	.078	1	199	.781
Dimension2	2.987	1	199	.085

	Levene's Statistic	df1	df2	Sig.
Dimension3	1.541	1	199	.216
Dimension4	.001	1	199	.971
Dimension5	.191	1	199	.663
Dimension6	.076	1	199	.783
Dimension7	.084	1	199	.773
Level1	.545	1	199	.461
Level2	1.541	1	199	.216
Level3	.000	1	199	.983

This table displays the test statistic for four different versions of Levene's Test. The numbers of interest in the first row present Levene's test for each outcome variable based on the mean. For example, the test statistic for Dimension 1 is .078 and the corresponding p-value is .781. Since this p-value is not less than .05, I failed to reject the null hypothesis. This means there is insufficient evidence to say that the variance in employees' perceptions of Dimension 1 is significantly different across the tenure and management categories. Similarly, there is insufficient evidence to say that the variance in employees' perceptions of the other six dimensions and three levels of the learning organization are significantly different across the tenure and management categories. Therefore, all the groups have equal variances, and the one-way ANOVA assumption is satisfied.

I applied the ANOVA statistical test to the dataset since all assumptions were satisfied or the violations acceptable. The ANOVA test was done to check for significant differences in employee perceptions across the four management levels and five tenure categories. The results indicated no significant differences in employee perceptions of the learning organization's dimensions and levels based on management level since all significant values of the F statistic were greater than $p = 0.05$. However, significant differences in employee perceptions were observed based on tenure (length of employment). These differences were observed on Inquiry/Dialogue (Dimension 2, $p = 0.08$), Organization-Environment Connection (Dimension 6, $p = 0.039$), and Individual Level learning (Level 1, $p = 0.042$). On the other five dimensions and two levels, no significant differences in employees' perceptions based on tenure were observed, refer to Table 10. To determine the tenure subgroups with significant differences in perception, I performed the Tukey Post-Hoc test on the three constructs that indicated significant differences in employees' perceptions. The results indicated significant differences in perceptions between employees with 6 - 10 years of tenure and those with 16 – 20 years of tenure on Dimension 2, Inquiry/Dialogue, $p = 0.004$, Dimension 6, Organization-Environment Connection, $p = 0.017$, and Level 1, Individual level learning, $p = 0.033$, see Table 10.

Interview Data Analysis

I transcribed the five interviews verbatim, resulting in the data corpus, a single text file of interview data. This transcription process involved listening to the recorded interviews until the audio MP3 files were reproduced as text data. I started the transcription process on March 30, 2020 and completed it on May 16, 2020. The data corpus was fifty-two (52) letter sized pages consisting of one thousand nine hundred and fifty (1950) single-spaced lines of text data.

The transcription process itself is the beginning of qualitative data analysis. As I transcribed subsequent interviews, I went back to earlier interviews to link concepts, ideas, and themes. I made mental notes of ideas that emerged during transcription and became familiar with scenarios the interview participants described. Even before I began the process of documenting the ideas as codes, I created mental maps and associations. One data analysis strategy I used during transcription was to note ideas that resonated in all capital letters, so it was salient during subsequent rounds of data analysis. I completed analysis of the interview data corpus in three cycles summarized below.

First, I began the data analysis as I transcribed the five interview recordings by underlining, highlighting, and boldfacing recurring ideas. I also compared views across participants and took notes. In this first cycle, I assigned initial codes. These were words or phrases that represented my first observations of concepts that emerged in the data corpus. I used In Vivo Coding, also called Verbatim Coding or Literal Coding in this cycle. This process uses words or short phrase excerpts directly lifted from the text. It assigns actual language used by the participants during the interaction as captured in the transcripts (Saldana, 2013). Additionally, during the 1st cycle coding, I considered and annotated recurring themes observed in the data. Saldana (2013) distinguishes a theme from a code this way, “A theme is an outcome of coding, categorization, and analytic reflection, not something that is coded” (p. 175). Saldana (2013) defines a theme as:

An extended phrase or sentence that identifies what a unit of data is about and/or what it means. At a minimum, it describes and organizes possible observations or at the

maximum, interprets aspects of the phenomenon. It may be directly observable in the data or inferable. (p. 175)

Secondly, I used a hybrid coding process to assign codes to recurring ideas and concepts observed in the data corpus. Codes are words or phrases that I assigned to a segment of text in the data corpus. At times, it was a direct extract from the text and other times a rephrasing. The codes reflected my understanding of the ideas and concepts observed in the data corpus. Johnny Saldana (2013) describes coding as iterative. “The researcher compares data to data, data to code, code to code, code to category, category to category, and category back to data” (p.58). He suggests that this qualitative analytic process is cyclical, not linear. He recommends researchers apply first and second cycle coding methods to the data corpus. First cycle coding methods are the processes that happen during the initial coding and recoding of data. Second cycle methods are those that require analytic skills like classification, prioritization, integration, abstraction, conceptualization, synthetization, and theory building to the data corpus. Hybrid coding, also referred to as Eclectic Coding or Open Coding, combines elements of both first and second coding cycles (Saldana, 2013). In the second cycle coding, I revisited the initial codes and added, revised, and merged some of the initial codes into new overarching codes.

During the third cycle, I collapsed, integrated, and categorized codes into themes. Themes capture and consolidate the essence of other ideas. They serve as overarching umbrellas that cover similar concepts. To perform this theming of the data, I examined the codes in context of the participants exacts words to ascertain that I appropriately integrated concepts that described similar experiences. This theming exercise applies an assumption of phenomenology that I as the researcher can access in-depth life experiences based on assumed

interconnectedness, intuition, exploration, and thematic analysis of information from others (Grbich, 2013). With hybrid coding, there is not a defined end to the first cycle and a distinct start of the second, but a continuous, iterative, and cyclical application of a range of coding rules and tenets throughout the entire process of qualitative data analysis.

I utilized NVivo 21, a robust qualitative data analysis tool. The NVivo platform served as a repository for the transcribed interview data and analytical memos during data analysis. It provided the functionality to link phrases or words as codes and themes with a quick reference to the text selection within the data corpus. This feature was useful to reference codes during the iterative data analysis cycles. Additionally, it helped with the collapsing and categorizing of codes into themes.

Participants

This research study was done in a medium to large state of Georgia government agency. The agency is a multi-faceted organization with over 100 offices throughout the state of Georgia and a central office in the heart of Atlanta. Three hundred and thirty-eight (338) employees voluntarily participated in the questionnaire study while five (5) employees participated in the interview study. An invitation to participate in the questionnaire study was initially sent to all employees in the email distribution list of the agency on December 10, 2019. The assigned agency contact sent a second notification encouraging voluntary participation on January 7, 2020. After this, I ended the recruitment campaign but left the questionnaire open for others who may opt to complete. The first page of the questionnaire presented instructions and the informed consent language. The participants were required to accept the consent terms to proceed to the DLOQ questions for the study. The questionnaire response rate was 9.7%.

Questionnaire Participants Demographic Data

This study focused on a Georgia state government agency with over 3000 employees. The agency hires full and part time employees and contractors. Only full-time employees were included in the recruitment effort. The invitation to participate requested that contractors and part-time staff exclude themselves. Additionally, the interview participants selected were full time employees of the agency. Three hundred and thirty-eight (338) employees responded to the questionnaire. The questionnaire participant demographics appear in Table 6. The largest participant age group was 45 to 54 years ($n = 95$; 28.1%). The second largest age range was 35 to 44 years ($n = 79$; 23.4%). The population consisted of more women ($n = 198$; 58.6%) than men ($n = 88$; 26.0%). Additionally, some respondents selected gender as other ($n = 2$; 0.6%), indicating neither male nor female while some left gender blank ($n = 50$; 14.8%). Most participants identified as Black/African-American ($n = 161$; 47.6%) while the next largest ethnicity group was White/Caucasian ($n = 109$; 33.2%).

Table 6*Frequency Distribution of Employee Demographics*

	Frequency	Percent
Gender		
Female	198	58.6
Male	88	26.0
Other	2	.6
Blank/No Response	50	14.8
Age		
18 to 24	8	2.4
25 to 34	49	14.5
35 to 44	79	23.4
45 to 54	95	28.1
55 to 64	47	13.9
65 to 74	8	2.4
75 to 84	1	.3
Blank/No Response	51	15.1
Ethnicity/Race:		
American Indian or Alaska Native	1	.3
Asian	2	.6
Black/African-American	161	47.6
White/Caucasian	109	33.2

I conducted recruitment for the qualitative and quantitative strands concurrently. Five participants completed both strands of the study. For the QUAL strand, I selected a random purposeful convenience sample of individuals that satisfied the tenure and management level criteria to participate in a 45-minute-long phenomenological interview. According to Wertz

(2005), the phenomenological approach is a “descriptive and qualitative study of experience that attempts to faithfully conceptualize the process and structure of mental life including the meaningful world that is lived through experience (p. 170).” Furthermore, he explains that phenomenological research “constantly holds in view concrete examples of the experiences under investigation. It seeks to understand the essence of lived experiences and what they represent” (p. 170). Grbich (2013) defines phenomenology as “an approach that attempts to understand the hidden meanings and the essence of an experience together with how participants make sense of these” (p. 92). She explains that while these ‘essences’ may not be known a priori; they can become known through meaningful interaction between researcher and respondents.

The interview interactions elicited concrete examples of the learning experiences of five employees through specific examples and stories. The exchange focused on the employees. They described their experiences learning individually, as part of a team, and part of their organization. I sent reminder emails that included the informed consent to all participants ahead of the scheduled interview session. I met with the participants at a place and time mutually agreed on. Before the interview began, participants signed the informed consent form (Refer to Appendix D, Informed Consent Forms). With the permission of the participants, I audio taped the interviews. The interviews were semi-structured exchanges. This means that although I had prepared ten (10) questions ahead of the interview, I allowed deviations driven by the participant’s experiences and followed up on concepts that emerged. The prepared questions served as a roadmap to begin examination of the phenomenon. I found that the respondents provided other perspectives and phenomena I had not included in the questions. I allowed some time for deeper discussion in efforts to understand their experiences when the participant

introduced them. I only pivoted to the interview questions when we both felt comfortable moving on.

This study utilized a Parallel Mixed Methods Sampling (Parallel MM) scheme in participant recruitment. Parallel MM sampling is where the sampling procedures used to generate data for the Quantitative (QUAN) strand and the Qualitative (QUAL) strand can occur independently. This sampling technique permits researchers to triangulate results from separate QUAN and QUAL components of their research, thereby allowing them to “confirm, cross-validate, or corroborate findings within a single study” (Teddie & Tashakori, 2015, p. 187). Furthermore, this sampling scheme checks for complementarity between the study’s methodological strands and illuminates inconsistencies that may require further investigation with subsequent studies. I used a random convenience sampling scheme to recruit participants for the questionnaire study. This is because respondents randomly opted to complete the questionnaire when they satisfied the inclusion criteria. My goal was to recruit at least 400 participants to complete the questionnaire for a representative sample of the agency’s population and to estimate results of the analysis to about +/-5%. However, only 338 employees voluntarily participated in the quantitative strand of the study.

I utilized a random purposeful convenience sampling method to recruit interview participants. I added a preliminary question to the DLOQ questionnaire to solicit for interview volunteers. Participants that indicated interest provided their names and contact information. Of the 44 questionnaire respondents that indicated interest in participating in the interview, I categorized them by tenure and management level categories. I then randomly selected potential interview participants. I sent recruitment email invitations to those randomly selected (refer to

Appendix E, Invitation to Participate in Research Study). Only eight (8) employees responded to the recruitment email. Of those who responded, I suggested interview dates within 2-4 weeks of their response and scheduled interviews for times and locations that worked for them. My goal was to interview a participant from each of the four (4) management level categories and one from each of the five (5) length of employment categories. While I initially targeted 9 interview participants, I conducted five (5) interviews. Some of the participants satisfied multiple categories (see Table 7 for interview participant information). This was a convenience sampling scheme as volunteers were targeted and selected when they fit the categories sought. This sampling scheme has implications for the findings and conclusions as reported in the results section. Table 7 presents some information about the interview participants and the interview interaction.

Table 7*Interview Participants Information*

Participant ID	Interview Date, Time, & Location	Interview Duration	Management Level	Length of Tenure (Years)	Age Range	Gender	Race	Worked at another agency	DLOQ Done?
1	01/29/20; 5:30pm at a Lithonia Hotel Lobby	41 mins 49 secs	Mid-Level Manager	16-20	45-54	Female	Black or African American	Yes	Yes
2	02/19/20; 4:00pm at Participant Office	39 mins 37 secs	Executive Leadership/C-Level Manager	16-20	55-64	Female	White	No	Yes
3	02/23/20; 2:30pm via FaceTime: Participant in Americus, GA & Interviewer in Dallas, GA	29 mins 08 secs	Mid-Level Manager	0-5	45-54	Female	Black or African American	Yes	Yes
4	03/04/20; 1:00pm in Conference Room at participant work location	42 mins 55 secs	Non-Manual	6-10	45-54	Male	White	Yes	Yes
5	03/04/20; 3:00pm in participant office at work location	51 mins 07 secs	Senior-Level Manager	Over 20 years	65-74	Male	White	Yes	Yes
6	03/04/20; 4:00pm in participants office at work location	Not Applicable	Executive Leadership/C-Level Manager	Appointment was canceled same day by volunteer's administrative assistant; unique circumstances precluded possibility of rescheduling					No

Note. No Interview was conducted with a participant with 11-15 years of tenure with the agency.

Instruments

The Dimensions of a Learning Organization Questionnaire (DLOQ)¹

The Dimensions of the Learning Organization Questionnaire (DLOQ) is designed to measure seven dimensions in organizations that are indicative of employees' perceptions of the organization's learning culture, climate, structure, and overall environment. It was developed in the 1990s to assess organizational learning culture and has since been used for organizational research in many countries, languages, and settings. (Leufvén, et al., 2015). They state that researchers compared some of the instruments available in terms of scope, depth, and reliability. Subsequently, they concluded that the DLOQ "meets the three criteria of comprehensiveness, depth, and validity, and integrates important attributes of the learning organization" (Leufvén, et al., 2015, p. 2). There are two versions of the DLOQ, one full version with 43 measurement items and an abbreviated one with 21 items. Both versions have been validated as useful diagnostic tools for practitioners and provide a comprehensive assessment of the learning culture. Practitioners can use results in decision making and interventions. Refer to Table 2 on page 10 for DLOQ information. Yang et al. (2004) recommend the DLOQ as a useful tool for assessing dimensions of the learning organization. They used confirmatory factor analysis (CFA) to assess the construct validity of the dimensions of the learning organization. They obtained

¹ Note that only DLOQ questions 1 – 43 on pages 1-4 of the Instrument was used. The Measuring Learning Organization Results at the Organizational Level on page 5 & Additional Information about You and Your Organization on page 6 was not included in the survey questionnaire that was administered. Marsick and Watkins (2003) supplied the full version of the DLOQ instrument to PsycTESTS™, an American Psychological Association database with the following permissions. "Test content may be reproduced and used for non-commercial research and educational purposes without seeking written permission. Distribution must be controlled, meaning only to the participants engaged in the research or enrolled in the educational activity. Any other type of reproduction or distribution of test content is not authorized without written permission from the author and publisher. Always include a credit line that contains the source citation and copyright owner when writing about or using any test."

acceptable reliability estimates for the seven dimensions. Consequently, the DLOQ instrument was validated for use in organizational studies.

Reliability

Yang et al. (2004) performed a confirmatory factor analysis and obtained the reliability estimates by calculating the proportion of item variance that was accounted for by the latent variable.

Nunnally (1976) judges an instrument as performing acceptably when the reliability measures exceed the .70 level (as cited in Little & Swayze, 2015, p. 88). The reliability estimates of the seven dimensions exceeded this value.

Construct Validity

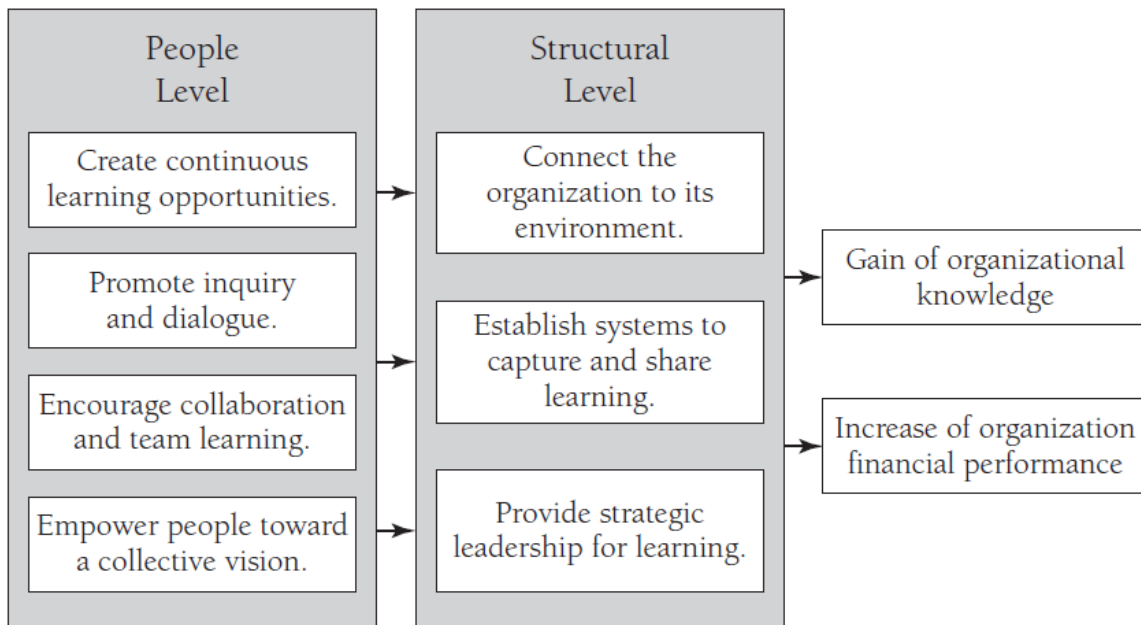
Yang et al. (2004) explain that construct validity reflects the extent to which an instrument's scale precisely measures what it is intended to. All the fit indices for both learning organization and performance outcomes were either above or close to .90. This indicated adequate model-data fit. The CFA results demonstrated construct validity.

Nomological Validity

The theoretical relationship among constructs in an instrument is a nomological network. Two variables, financial performance and knowledge performance, were constructed in the DLOQ to establish a nomological net between learning behaviors and outcomes.

Figure 4

DLOQ Nomological Network



Note. The nomological network demonstrates the relationship between the dimensions of learning organization and outcomes (Retrieved from Yang et al. (2004, p. 41).

Structural equation modeling (SEM) was used to assess the nomological network, and the results demonstrated the instrument's nomological validity. The seven dimensions of the learning organization had significant effects on organizational outcomes.

Reliability & Validity in Current Study

I calculated Cronbach's alpha coefficients for each DLOQ construct (refer to Table 8 below). The reliability measure for each learning organization dimension exceeded the recommended 0.70 level of acceptability (Nunnally, 1976 as cited in Little, J., & Swayze, 2015, p. 88). Therefore, the DLOQ instrument performed well in this Georgia state government setting.

Table 8*Current Study Cronbach's Alpha Coefficient of Reliability and Validity*

DLOQ Questions				
	Learning Organization Level	Cronbach's alpha coefficients	Learning Organization Dimension	Cronbach's alpha coefficients
1-7			Continuous Learning Opportunities (Dimension 1)	.951
8-13	Individual	.584	Inquiry & Dialogue (Dimension 2)	.950
14-19	Team	.783	Collaboration & Team Learning (Dimension 3)	.944
20-25			Created Systems & Shared Learning (Dimension 4)	.952
26-31	Organization	.821	Collective Vision (Dimension 5)	.947
32-37			Organization-Environment Connection (Dimension 6)	.946
38-43			Strategic Leadership for Learning (Dimension 7)	.946

Response Rates in Some Past Studies Using the DLOQ

An examination of response rates in published studies which used the DLOQ revealed a wide range of results. Little and Swayze (2015) reported a 59% response rate in a survey research study that examined the relationship between the constructs of psychological capital and the seven dimensions of a learning organization. Similarly, Leufvén et al.'s (2015) study to assess context using the DLOQ in a low-resource health setting in Nepal had a 59% response rate. Kumar et al.'s (2016) cross-sectional study that assessed health care context using the DLOQ in a national capital region of India reported a comparatively high response rate of 91%. Finally, a study that examined managers' perceptions of the learning organization's dimensions and their firms' financial performance had an 18% response rate (Davis & Daley, 2008). The

response rate from the current study was about 9.7%. Of the 3000+ employees to whom the agency contact sent the questionnaire, 338 voluntarily participated.

Expectations

The objective of a Concurrent MM Research design is to investigate the complementarity of data from multiple sources. Therefore, one can explore the extent to which data from multiple sources juxtapose. A Concurrent MM Research design also explores how data from multiple sources align in explaining a phenomenon. I compared results from the QUAN strand to the QUAL strand to assess complementarity and convergence. The objective was to examine similarities and contradictions between the questionnaire and interview data. The qualitative and quantitative data provided useful insights. I expected to find significant differences in employee perceptions of learning based on management level and tenure with the agency. I also anticipated that analysis of the interviews would reveal invaluable insights not easily observed in the questionnaire data. I observed some significant differences in learning perceptions. However, they were not as comprehensive as I had anticipated. My expectation that themes from the interview data would illuminate the questionnaire findings was realized.

Ethics

Throughout both strands of the research study, I attempted to embody ethical expectations. I considered all information collected from and shared by participants as private and confidential. I expected that during the interviews, participants might divulge privileged or potentially controversial information. Additionally, some questionnaire respondents provided their names in response to the interview recruitment item. I understood that information in the interview and questionnaire could result in undesired exposure. I did not share any part of an interview dialog or transcript with others verbally or in writing. I also ensured that each

participant felt safe and secure in trusting me with information regarding their lived experiences. Furthermore, I safeguarded the questionnaire and interview data to prevent access by others. I aggregated results so that individual information was not identifiable. I also scrubbed real names from the data corpus and used pseudonyms to protect the identity of participants. During the entire study, I did not manufacture or manipulate the data collected to influence the findings. I made effort to adhere to sound, systematic, and research-based principles. The study findings present only observed results from the data analysis.

Results

This concurrent mixed-methods study juxtaposed insights from the Qualitative (QUAL) strand of the study with findings from the Quantitative (QUAN) strand. The QUAL strand used phenomenological interviews to examine the lived experiences of employees (adult learners) in the organization. The QUAN strand used the Dimensions of the Learning Organization Questionnaire (DLOQ) to measure employees' perceptions of learning. In this chapter, I present the findings to the research questions:

1. How do employees navigate learning individually, in teams, and organizationally in this Georgia state government agency?
2. How do employee perceptions of the learning organization compare based on tenure and management level?

I examined employees' perceptions of learning in this state government setting using the DLOQ. Employees' perceptions of learning in this organization were examined and compared across management level and tenure (length of employment). Management level categories are executive management/C-level managers, senior level managers, mid-level managers, and non-managers/front line staff. Tenure categories are 0 year to 5 years, 6 years to 10 years, 11 years to 15 years, 16 years to 20 years, and over 20 years. I also examined employees' learning experiences. This chapter presents findings for the research questions.

Below, Table 9 presents the frequency distribution of employees based on some descriptive characteristics collected with the DLOQ. Table 10 presents results of the One-Way ANOVA test that compared employees' responses by management level and tenure categories. Tables 11 - 12 present the Mean and Standard Deviation (S.D) of the DLOQ constructs calculated from the questionnaire responses.

Table 9*Frequency Distribution Based on Employee Characteristics*

	Frequency	Percent
Management Level:		
Executive Leadership/C-Level Manager	4	1.2
Mid-Level Manager	90	26.6
Non-Managerial	158	46.7
Senior Level Manager	35	10.4
Blank/No Response	51	15.1
Worked at another state of GA agency?		
Yes	112	33.1
No	175	51.8
Blank/No Response	51	15.1
Number of years employed at current agency:		
0 to 5 years	143	42.3
6 to 10 years	45	13.3
11 to 15 years	34	10.1
16 to 20 years	30	8.9
Over 20 years	36	10.7
Blank/No Response	50	14.8

Table 10*One-Way ANOVA Test of Significance Results*

DLOQ Subconstruct	Race	Age Range	Gender	Worked at Another State Agency	Management Level	Tenure/Length of Employment at Current Agency
D1 Continuous Learning	0.692	0.459	0.577	0.092	0.885	0.221
D2 Inquiry and Dialogue	0.335	0.605	0.411	0.496	0.357	0.008*
D3 Collaboration and Team Learning	0.736	0.744	0.665	0.864	0.411	0.143
D4 Created Systems and Shared Learning	0.315	0.740	0.327	0.626	0.811	0.198
D5 Collective Vision	0.446	0.649	0.385	0.173	0.801	0.142
D6 Organization Environment Connection	0.857	0.618	0.761	0.855	0.794	0.039*
D7 Strategic Leadership for Learning	0.656	0.306	0.666	0.650	0.573	0.072
L1 Individual Level	0.803	0.544	0.554	0.221	0.627	0.042*
L2 Team Level	0.736	0.744	0.665	0.864	0.964	0.143
L3 Organization Level	0.642	0.590	0.527	0.660	0.863	0.089

Table 11*Mean & SD of Management Level Scores (Dimensions 1 – 7 and Levels 1 - 3)*

	Mean statistic	SD statistic
Dimension 1 - Continuous Learning		
Non-Manager	3.06	1.23
Mid-Level Manager	3.12	1.16
Senior Level Manager	3.25	0.98
Executive Level Manager	3.29	1.43
Dimension 2 - Inquiry and Dialogue		
Non-Manager	2.86	1.33
Mid-Level Manager	3.00	1.14
Senior Level Manager	3.29	0.92
Executive Level Manager	3.44	1.68
Dimension 3 - Collaboration and Team Learning		
Non-Manager	2.94	1.35
Mid-Level Manager	3.10	1.15
Senior Level Manager	3.36	1.09
Executive Level Manager	3.33	1.36
Dimension 4 - Created Systems and Shared Learning		
Non-Manager	3.06	1.36
Mid-Level Manager	3.17	1.16
Senior Level Manager	2.99	1.02
Executive Level Manager	2.61	1.42
Dimension 5 - Collective Vision		
Non-Manager	2.66	1.26
Mid-Level Manager	2.78	1.24
Senior Level Manager	2.90	1.19
Executive Level Manager	2.72	1.34
Dimension 6 - Organization Environment Connection		
Non-Manager	3.04	1.31
Mid-Level Manager	2.99	1.25

Senior Level Manager	3.27	1.18
Executive Level Manager	2.94	1.68
<hr/>		
Dimension 7 - Strategic Leadership for Learning	Mean statistic	SD statistic
<hr/>		
Non-Manager	3.14	1.50
Mid-Level Manager	3.35	1.33
Senior Level Manager	3.51	1.17
Executive Level Manager	3.28	1.90
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Level 1 - Individual Level		
<hr/>		
Non-Manager	2.97	1.23
Mid-Level Manager	3.06	1.11
Senior Level Manager	3.27	0.90
Executive Level Manager	3.36	1.54
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Level 2 - Team Level		
<hr/>		
Non-Manager	2.94	1.35
Mid-Level Manager	3.10	1.15
Senior Level Manager	3.36	1.09
Executive Level Manager	3.33	1.36
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Level 3 – Organizational Level		
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Non-Manager	2.97	1.28
Mid-Level Manager	3.07	1.16
Senior Level Manager	3.17	1.03
Executive Level Manager	2.89	1.48
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Note. Mean & Standard Deviation (S.D) values of DLOQ Subconstructs (Dimensions 1 to 7 and Levels 1 to 3) across Management Level.

Table 12*Mean & SD of Tenure Scores (Dimensions 1 – 7 and Levels 1 - 3)*

	Mean statistic	SD statistic
Dimension 1 - Continuous Learning		
0 – 5 years	3.20	1.27
6 – 10 years	2.75	1.08
11 – 15 years	2.92	1.11
16 – 20 years	3.39	0.94
Over 20 years	3.17	1.12
Dimension 2 - Inquiry and Dialogue		
0 – 5 years	3.06	1.40
6 – 10 years	2.41	1.00
11 – 15 years	2.81	1.09
16 – 20 years	3.52	0.71
Over 20 years	3.06	1.10
Dimension 3 - Collaboration and Team Learning		
0 – 5 years	3.15	1.40
6 – 10 years	2.63	1.08
11 – 15 years	2.90	1.07
16 – 20 years	3.39	1.07
Over 20 years	3.14	1.14
Dimension 4 - Created Systems and Shared Learning		
0 – 5 years	3.17	1.37
6 – 10 years	2.78	1.22
11 – 15 years	3.01	0.91
16 – 20 years	3.49	1.18
Over 20 years	2.88	1.09
Dimension 5 - Collective Vision		
0 – 5 years	2.87	1.35
6 – 10 years	2.40	1.14
11 – 15 years	2.59	0.97

16 – 20 years	3.12	1.10
Over 20 years	2.55	1.20
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Dimension 6 - Organization Environment Connection	Mean statistic	SD statistic
<hr/>		
0 – 5 years	3.11	1.39
6 – 10 years	2.52	1.19
11 – 15 years	3.08	0.89
16 – 20 years	3.55	1.05
Over 20 years	3.07	1.26
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Dimension 7 - Strategic Leadership for Learning		
<hr/>		
0 – 5 years	3.25	1.53
6 – 10 years	2.74	1.22
11 – 15 years	3.43	1.38
16 – 20 years	3.77	1.19
Over 20 years	3.36	1.24
<hr/>		
Level 1 - Individual Level		
<hr/>		
0 – 5 years	3.14	1.29
6 – 10 years	2.59	0.99
11 – 15 years	2.87	1.01
16 – 20 years	3.45	0.78
Over 20 years	3.12	1.07
<hr/>		
Level 2 - Team Level		
<hr/>		
0 – 5 years	3.15	1.40
6 – 10 years	2.63	1.08
11 – 15 years	2.90	1.07
16 – 20 years	3.39	1.07
Over 20 years	3.14	1.14
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Level 3 – Organizational Level		
<hr/>		
0 – 5 years	3.10	1.38
6 – 10 years	2.61	1.09
11 – 15 years	3.03	0.92
16 – 20 years	3.48	1.03
Over 20 years	2.96	1.10
<hr/>		

Note. Mean & Standard Deviation (S.D) values of DLOQ Subconstructs (Dimensions 1 to 7 and Levels 1 to 3) across Tenure/Length of Employment at Current Agency in years.

Questionnaire Data Results and Findings

I applied the ANOVA statistical test to the dataset since all assumptions were satisfied and violations justified. The ANOVA test was done to check for significant differences in employee perceptions across the four management levels and five tenure categories. The results indicated no significant differences in employee perceptions of the learning organization's dimensions and levels based on management level since all significant values of the F statistic were greater than $p = 0.05$. However, significant differences in employee perceptions were observed based on tenure (length of employment). These differences were observed on Inquiry/Dialogue (Dimension 2, $p = 0.008$), Organization-Environment Connection (Dimension 6, $p = 0.039$), and Individual Level learning (Level 1, $p = 0.042$). On the other five dimensions and two levels, no significant differences in employees' perceptions based on tenure were observed, refer to Table 10. To determine the tenure subgroups with significant differences in perception, I performed the Tukey Post-Hoc test on the three constructs that indicated significant differences in employees' perceptions. The results indicated significant differences in perceptions between employees with 6 - 10 years of tenure and those with 16 – 20 years of tenure on Dimension 2, Inquiry/Dialogue, $p = 0.008$, Dimension 6, Organization-Environment Connection, $p = 0.039$, and Level 1, Individual level learning, $p = 0.042$, see Table 10. The one-way ANOVA test compares sample groups for significant differences. The results of this test indicated there are significant differences in employee perceptions on Dimension 2, Inquiry/Dialogue ($p < 0.05$; 0.008); Dimension 6, Organization Environment Connection ($p < 0.05$; 0.039); and Level 1, Individual Level ($p < 0.05$; 0.042) based on the employees' tenure

(Refer to Table 10 on page 71). Since there were significant difference in employees' perceptions based on tenure, I performed post hoc tests. The tenure (length of employment) categories are: 0 to 5 years, 6 to 10 years, 11 to 15 years, 16 to 20 years, and over 20 years. Only employees with 6 to 10 years of tenure and those with 16 to 20 years of tenure revealed significant differences in perceptions on the Inquiry/Dialogue, Organization-Environment Connection, and Individual Level constructs. All other tenure categories indicated no significant differences on these three constructs (Refer to Appendix F, Quantitative Data Analysis Supplemental Information).

Table 13

Tukey & Bonferroni Post Hoc Multiple Comparisons Test

Significant Construct (Dimension/Level)	Comparison Samples for Length of Employment in years (Tenure)	Tukey HSD Significant Value	Bonferroni's Adjusted Significant Value
Individual Learning (Level 1)	6 - 10 & 16 - 20	0.033	0.041
D2 Inquiry/Dialogue	6 - 10 & 16 - 20	0.004	0.005
D6 Organization Environment Connection	6 - 10 & 16 - 20	0.017	0.020

Interview Data Results and Findings

Following is a discussion of major findings from the interviews. It presents the major themes and recommendations that emerged from the interview exchange (refer to Appendix G for Qualitative Data Analysis Supplemental Information). The role of leadership in organizational learning was most prominent. Eight (8) theme categories emerged from the data analysis. They are: Leadership; motivation to learn; communication; expanded training; learning

styles; workplace culture; mentoring & coaching; and team building. These theme categories are comprised of themes and codes (refer to Table 14 for the theme categories).

Table 14

Interview Data Emerged Themes

Theme Category				
#		Number of Themes in Category	Number of Codes in Category	Total Code Word/Phrase Count in Category
1	Leadership	6	19	139
2	Motivation to Learn	3	3	33
3	Communication	2	9	21
4	Expanded Training	2	6	28
5	Learning Styles	2	3	8
6	Workplace Culture	2	14	16
7	Mentoring & Coaching	1	3	12
8	Team Building	1	2	13

Leadership Matters

The six (6) leadership category themes and descriptions are presented in Table 15 below.

Table 15

Emerged Leadership Themes

#	Leadership Category Theme	Theme Short Description
1	Leadership style for all learning	Exemplary leaders allow team members to contribute to their learning and give them a platform to voice their input.
2	Leader dependent Learning Structure	Learning on all levels and dimensions may depend on the type of leader (supervisor) an employee has. The leader's priorities, motivations, and style may influence the group or team.
3	Leadership Training for all learning	Equip leaders to lead by training them to lead their teams.
4	Leader openness & support for all learning	Transparency, accessibility, approachability, and openness may help group/team learning
5	Demonstrate employee value & Invest in Employees	Investing in employees by allowing them opportunities to access training makes them feel valued. This has implications for individual, team, and organization learning
6	Trust & authenticity essential for all learning	Employees need to trust the leadership to be open and motivated to learn

The above themes on leadership emerged from the interview data as evidenced in the following statements from the participants. Apple A said,

so, I'm the leader of my team, so one of the things that is important to me is that I pull my team along with me...just giving them more responsibilities...and seeing how they work with it...and finally make some adjustments...(interview transcript, line 265)" On an environment conducive to learning, she said, "... it would be a supervisor that encourages...that is open to going to trainings...you need someone that would answer questions and would have the knowledge to be able to the answer questions." On effective communication in the agency, she explains, "...it goes back to the supervisor and the leadership...everybody is a leader and so everybody should be developing those under them. (interview transcript, line 453)

Tinsel B elaborated on how the leadership influenced employee learning by describing how the landscape had evolved over her tenure:

Absolutely! The kind of training, the support you are exposed to has been different depending on our commissioner, the top leadership of our agency. When a practitioner or expert came to our state already with specialized experience...there was more focus on industry best practice and leadership aligned with the national best practices. When we had leadership that did not have industry experience, and did not have experience in leadership, [training/learning opportunities] was not nearly as available or impactful. (interview transcript, line 593)

Furthermore, Ion C explained, "...you reinforce those goals with constant information flow, that's why it considered a required core competency of the leader, if I don't know what my agency leadership is thinking, I can't respond accordingly..." (interview transcript, line 1226). Additionally, he linked training and leadership, ...

the first line supervisor should be the one training the people in their business unit on what the levels of the performance are, that is why leadership and training are intrinsically linked; if you don't have a trainer in a leadership position, it will show in the fabric of the business unit overall. (interview transcript, line 1228)

Describing leadership traits, Ninja E said, "...and me as a leader appreciate and understand that I can't do their job as well as they do...it really takes a certain skill-set to be a regional leader, and I don't have that skillset, I just have to appreciate what they have and let them do their work...." (interview transcript, line 1777). On his journey as a leader, he says, "...so I had to come in and be a leader before I had the tools to be a leader...yes, building a ship and riding it at the same time. (interview transcript, line 1555)

Other themes emerged from the data and are presented in Table 16 on page 82.

Table 16*Emerged Multi-Category Themes*

Category Themes		Theme Short Description
Motivation		
1	Research & Self-Development	Individual level learning strategy where employees seek out information for their own benefit.
2	Self-Study & Self-directed learning	Some activities individual employees' do to improve themselves such as constant study.
3	Motivation to Learn	The employee must be motivated to learn and access information.
Communication		
1	Communication & Information Sharing will improve all learning	Resources are available but may be unknown to employees. Employees may be uninformed about resources they can take advantage of.
2	Tenure-Resource Awareness dependency	It appears the longer you stay with the agency, the greater opportunity you have of being availed or aware of resources for individual learning.
Training		
1	Job Role dependency for learning	Individual learning opportunities may depend on the job position.
2	Expanded Training Structure for all learning	Employees should be offered training opportunities beyond the basics needed to perform their job duties. Consider training on soft skills, leadership skills etc.
Learning Style		
1	Multimodal learning formats (Flexibility) for all learning.	Supervisor combines formal and informal learning to provide a wide range of team learning opportunities.
2	Individual Learning Styles	Individual differences may affect how employees learn.
Workplace Culture		
1	Employees removed from common vision.	Employees did not feel included in the strategic planning process.
2	Collaborations, Connections, Networking, & Supportive Culture.	Employees must interact with internal and external resources to encourage multilevel learning. The work environment and culture must support learning.
Mentoring		
1	Mentoring & Coaching for all Learning	Cross-training, Peer-to-Peer support, and knowledge transfer should be encouraged to facilitate learning individually, in teams, and across the organization. More experienced employees can coach less experienced ones to exponentially increase learning outcomes and gains. This is related to DLOQ, Dimension 2 - Inquiry & Dialogue
Team Building		
1	Team building activities to improve learning	The leader actively builds team members, pulls them along, encourages them to grow, and actively provides opportunities for their professional and personal development in the workplace.

Motivation Matters

The three (3) motivation-to-learn category themes and descriptions presented in Table 16 are Research & Self-Development, Self-Study & Self-directed learning, and Motivation to Learn. These themes on motivation emerged from the interview data as evidenced in the following statements from the participants. On how she learns and develops herself, Apple A said,

that's been one of my things...I do research, I watch more videos..." (interview transcript, line 45) and "I did a lot of workshops, I went to conferences...I did a lot of research, watched videos, just whatever I could find that would help me to understand better..." (interview transcript, line 98). On the role motivation plays in learning, she said, "...I have some people on my team, they'll go out there, they'll find these different trainings and things to go to...and I have some who I go to and say, 'did you see this training, do you want to go'? This will be a good idea if you go to this training. (interview transcript, line 270)

Tinsel B also sought out learning opportunities. She explained that [though] there has been some sporadic leadership training opportunities...I'm the type of person that pursues it on my own. I bought leadership books. I have done webinars. I have sought out training opportunities on my own just to get caught up on that. (interview transcript, line 575)

Regarding how he learns, Ion C stated in one word.... I'll say self-study, that's hyphenated, so technically, it's one word ...it is driven by circumstances you encounter requiring research... it's self-study, it's an event that is driven by circumstances that arise that you have to go research to see how to solve the circumstances." (interview transcript, line 1178). He also explained, "...

if there's already been a precedent set and a decision pertaining to business operations, I will go research that to see what my limits are legally or to see what other states have done, that is typically an example of day-to-day of negotiating business operations with different units that approach me for advice. (interview transcript, line 1196)

August D said, "...one thing I do enjoy about XYZ agency, they do have the policy; if I need to go to review a policy, I can go back and reference...research them..." (interview transcript, line 954). Additionally, regarding how she equips her team, "I looked at research as to what people have said have been good things for small offices to better communicate, such as trust, reliability, dependability, so those are the kind of things that I've pretty much spearheaded" (interview transcript, line 1023).

Communication Matters

The two (2) communication category themes and descriptions presented in Table 16 are Communication & Information Sharing and Tenure-Resource Awareness dependency.

These themes on communication emerged from the interview data as evidenced in the following statements from the participants. On communicating the organization's strategic plan, Apple A said,

You can find it in some website if you know where to [look]...I'm not sure I saw an email go out to the whole agency that the strategic plan was there...but I did get it from my supervisor who got it from her supervisor so that's how we ended up with it...so it was more or less left to the department heads to trickle it down. (interview transcript, line 440)

Elaborating on that, Ion C said,

so strategic communication is a core competency of the strategic leader...a strategic leader is the one who orbits around the next higher level of government...communicates with the governor's office and other strategic leaders...because it is a means to guide the overall characteristics of the agency. (interview transcript, line 1220)

Additionally, he states that,

you want to anchor [desirable] behaviors in your agency by establishing a core of subordinate leaders that are similarly situated in terms of following the goals the agency has set for itself...you reinforce those goals with constant information flow..., that's why it considered a required core competency of the leader, if I don't know what my agency leadership is thinking, I can't respond accordingly...so if you're telling me an organization needs to effect a cultural change, tell me why as an employee the urgency...point to a business case, and say this is why it's so important that we do X, Y, and Z. (interview transcript, line 1226)

On how communication may be enhanced, he explains,

there should be a continual outflow of scholarly publications that serve a couple of different purposes...number 1, it gives the added benefit to the employee to be able to research...number 2, it strengthens the business operations of the agency... [it reveals] best practices that could be shared among staff so it's not difficult for us to learn from each other and do it in a scholastically legitimate conduit. (interview transcript, line 1196)

Training Matters

The two (2) training category themes and descriptions presented in Table 16 are Job Role dependency and Expanded Training Structure. These themes on expanded training emerged from the interview data as evidenced in the following statements from the participants. When asked how to improve communication and strategic engagement in the organization, Apple A said,

what I think is it's hit or miss, and that's because partly because we have some people that need more leadership training." Regarding measures to increase employee learning opportunities, she recounted "I can remember...people who would say, 'you just go on training like vacation'...if you have that mindset, you don't think it's important for anybody, and I think that's one of the things we have to make sure our leadership understands from the top down. (interview transcript, line 362)

On training gaps, Tinsel B explained some challenges this way,

I have been working at XYZ agency here for [some time] ...it has been a kind of up and down experience around professional development...through the years, the most frustrated I have been is around technology. The agency will develop new technology or new resources around technology and there was rarely any training on that...I had to learn by trial and error or pull somebody in...I would have to depend on other people and have to find other people that would teach me...there was not a real clear guideline every time we implement new technology. (interview transcript, line 561)

She also says,

there has been some sporadic leadership training opportunities...however, I'm the type of person that pursue it on my own...I have not felt that the leadership training within this agency met the specific needs for our agency...our agency is working at revising leadership training to be more aligned with national, state government, but really any type, business, customer service...and national best practices. (interview transcript, line 575)

As mentioned earlier, Ion C linked training and leadership, "...the first line supervisor should be the one training the people in their business unit what the levels of the performance are, that is why leadership and training are intrinsically linked" (line 1376). August D elaborated,

besides having the training classes in [city], I don't think that when I came on board there was lots of training, so it really is self-development, self, relying on other people to teach you XYZ agency culture, so there was no training mechanism to train you in your first 90 days of being employed, so if anything, that's something they need to hone in, training managers when they get promoted, training them in the responsibilities, we don't have that, I don't see that right now. (interview transcript, line 929)

Regarding focused training for increased organizational engagement, Ninja E explained,

when the deadline is passed [for an assigned training assignment], a list is generated of people who didn't complete it, your supervisor finds out, they swoop in and say, 'This 10 people did not complete it, can you complete it by the end of...tomorrow, whatever.' If we did a similar routine with the strategic plan. (interview transcript, line 1893)

Learning Style Matters

The two (2) learning style category themes and descriptions presented in Table 16 are Multimodal learning formats (Flexibility) and Individual Learning Styles. These themes on

learning style emerged from the interview data as evidenced in the following statements from the participants. On how learning style contributes to learning, Apple A said,

I have some people on my team, they'll go out there, they'll find these different trainings and things to go to...and I have some who I go to and say, 'did you see this training, do you want to go'? This will be a good idea if you go to this training. (interview transcript, line 270)

Pertaining to initiatives she would like to see more of, Tinsel B said,

Leadership training that is not lecture, speakers, but truly is process built and...demonstrates values and actions...and then actually put into place expectations of how we take what we've learned and we practice it, how we implement it...that there's not just a focus on knowing it, but what does it look like and how have you demonstrated this particular value in your team, how do you demonstrate this through your work. (interview transcript, line 627).

August D explained regarding available learning initiatives and advancement opportunities, "they offer them on a broad spectrum, but they don't offer more so that are tailored to you." (interview transcript, line 944). She elaborated,

I would like to see more SHRM, like if people don't have their SHRM certification, I would like to see that offered, I would like to see more leadership training, I would like to see more team building information so we can become a cohesive team together." (interview transcript, line 948).

In explaining how he learns best, Ninja E said,

I have learned best from people here at XYZ agency who have experience and can both tie [instruction] with basic examples with real life experiences about how things operate. The best way I learn is visually. I need to have something tangible to look at...I also learn better in contextual relationship with people.” (interview transcript, line 1521).

Workplace Culture Matters

The two (2) workplace culture category themes and descriptions presented in Table 16 are Employees removed from common vision and Collaborations, Connections, Networking, & Supportive Culture. These themes on workplace culture emerged from the interview data as evidenced in the following statements from the participants. Apple A said, “One thing that I’ve truly learned as a supervisor is that you get more response from people when you’re open, when you answer questions, give them as much information as possible...” (interview transcript, line 274). She explained her team’s involvement in organizational level matters, “... we actually got the strategic plan...we didn’t have anything to do with the development of it, but we do have some say so in how we go about implementing the different strategies.”

Tinsel B elaborates,

During the time period when there was not a culture of trust and value of training and new information, and progressively getting better, it was almost like you felt like you were asking for a privilege to go to a training...like they were doing you a favor by giving you permission to go to a training so you could be better at your job rather than saying, ‘we really want you [to go]’...and asking, ‘what do you need from me in order to grow...’ Then, you feel open to explore than if you are never asked. When you do ask for training, you’re treated as if you’re asking for a privilege, then it’s almost like, that training is not a development of me, it’s not a value... (interview transcript, line 651).

In describing a work environment conducive to learning, she said "...where there's trust and respect and an expectation or value of knowledge and information... and additional practice is reinforced." (interview transcript, line 643). Additionally, Ion C states that,

you change the culture of an organization by first communicating the urgency of a cultural change, so if you're telling me an organization needs to effect a cultural change, tell me why as an employee, what's the urgency, so a good way to do that is to point to a business case, and say, 'this is why it's so important that we do X, Y, and Z'." August D said regarding learning initiatives she would consider instrumental to learning, "...definitely, the culture of XYZ agency, that's a learning thing, people need to learn the culture of XYZ agency.... I think more leadership training... (interview transcript, line 939)

Regarding how he learns best, Ninja E stated, "...through the years, it has shifted depending on who my supervisors [leadership] are and what the work environment was like in that given time..." (interview transcript, line 1535).

Mentoring & Coaching Matters

The mentoring category theme and description presented in Table 16 is Mentoring & Coaching. This theme on mentoring and coaching emerged from the interview data as evidenced in the following statements from the participants. Apple A described the forms of coaching that happen in her teams.

It is like a little bit of both because there's two of our teams...it starts out like a classroom...and then it becomes a one-on-one. [For example], today, I gave a lot of assignments to get together to cross train. One of my other team members, has been going over to the other team to get some training. She is getting information as well as

giving information and so that is how that works. They work together to get [assignments] done, but we start out in the classroom. (interview transcript, line 293)

On how employees can demonstrate value through work and build each other up, Tinsel B explains, “I would say supportive coaching... culture where no one is criticized or demeaned for making mistakes rather that’s seen as a learning opportunity...it’s an opportunity to coach someone differently” (interview transcript, line 636).

Ion C linked communication to mentoring and coaching this way, “there should be a continual outflow of scholarly publications that serve a couple of different purposes...[it] could be shared among staff so it’s not difficult for us to learn from each other and do it in a scholastically legitimate conduit...” (interview transcript, line 1196). Additionally, August D said,

we also have a way where, people network with each other, so a networking system, so we can network and learn our strengths from each other, so pretty much what they provide is beneficial to me...because I came up with some necessary tools skills that they expect, are beneficial to me. (interview transcript, line 961)

Regarding how he learns best, Ninja E stated, “...I came into my job relatively naïve...so I had a couple mentors who helped and talked to me about [the discipline] ...here’s what you need to know...I had trusted experts” (interview transcript, line 1537). He elaborated on mentorship,

I have become aware of other organizations that have mentorship programs formalized. I think our agency is thinking of developing formal mentorship. Some of us are better at it than others. I think the person who is being a mentor also learns something in the process.

Ironically, when you are mentoring, you almost consolidate your learning to be kind of self-aware [and] understand what might be important for somebody new coming in [and] to share that with them...so, I think a mentorship program would be good. (interview transcript, line 1630)

Team Building Matters

The theme and description presented in Table 16 is Team building Activities. This theme on team building emerged from the interview data as evidenced in the following statements from the participants. Apple A said, “in my specific team, we are doing some cross training...we’re helping each other to learn what each other does...I’m the leader of my team.” (interview transcript, line 264). Tinsel B adds, “...there’s a focus on team leadership as opposed to working in silos.” (interview transcript, line 620). She provided a scenario-based suggestion to improve team learning.

I think one thing we’ve done in the past that could help...what we call a professional conference...the concept of a group of people learning together. If they are able to go somewhere, where they are not distracted by the regular work, it’s different [from] what they can do here [the work location] versus when we are able to go offsite and really focus on learning something new...and then gelling as a team to the point of being able to practice whatever we learn new. (interview transcript, line 729)

August D explained, “I diagrammed an effective communication for my team...looking at research...good things for small offices to better communicate, such as trust, such as reliability, such as dependability, so those are the kind of things that I’ve pretty much spearheaded...” (interview transcript, line 1023). She also adds, “...I would like to see more leadership training, I would like to see more team building information

so we can become a cohesive team together...” (interview transcript, line 950).

Furthermore,

our front-line workers...they are not teaching them the fundamentals of team building, the fundamentals of communication...sometimes the communication is always downward.... upward to downward, instead of downward moving upward. They need to learn this part of your organization is people who go out there and work for you every day. (interview transcript, line 970)

A Synthesis of the Findings

This discussion synthesizes findings from the qualitative and quantitative study strands. The data indicate there are significant differences in employee perceptions on Dimension 2, Inquiry/Dialogue ($p < 0.05$; 0.008); Dimension 6, Organization Environment Connection ($p < 0.05$; 0.039); and Level 1, Individual Level ($p < 0.05$; 0.042) based on the employees' tenure. Only employees with 6 to 10 years of tenure and those with 16 to 20 years of tenure demonstrated a significant difference in perceptions on these constructs.

Dimension 2, to promote inquiry and dialogue, illustrates that employees gain productive reasoning skills to express their views. They have the capacity to listen and inquire into the views of others. The culture where employees operate is modified to support questioning, feedback, and experimentation. Some interview participants expressed the occurrence of these activities through existing cross-training and networking opportunities. Others expressed a desire for more formal approaches to this exchange, through mentorship programs and supportive coaching. Similarly, all participants agreed that a culture of trust and openness facilitates employee engagement and learning. Dimension 6, to connect the organization to its environment, illustrates that employees understand the effect of their work on the entire enterprise. Employees

scan the environment and use information to adjust work practices. Additionally, the organization is linked to its community. Three of the five interview participants suggested front line workers may not be as connected to the organizations' goals and objectives as their counterparts in leadership positions. While all interview participants described self-study and research as a method of professional development, they expressed a desire for the organization to provide diversified yet tailored training pathways. Participants explained the organization's link to the community as dependent on the leadership. When the executive leadership included people with industry training and experience, the organization was more connected to its community and vice versa.

Level 1, individual level learning, represents how the unique individual learns. Level 1 is comprised of dimensions 1 and 2. Individuals constitute the basic building blocks of an organization. This finding suggests that employees with 6-10 years and 16-20 years of tenure have significantly different perceptions on how learning happens on the individual level in their organization. Interview participants expressed the sporadic nature of learning in the organization. Some employees were aware of available learning resources while others were not. It is possible that employees become better informed the longer they are employed with the agency. Three of the five participants expressed that accessibility to learning opportunities was dependent on the leadership. They explained that the leadership created a culture that either promoted or dissuaded learning. Given the varied lived experiences of the five interview participants, it may explain the significant differences observed in employee perceptions on inquiry and dialogue, organization-environment connection, and individual learning. These differences were observed based on the employees' tenure. Employees with 6-10 years of employment in the agency reported different perceptions from those with 16-20 years. It is possible that reasons for these observed differences

lie in the varied experiences the participants described in the interviews. In conclusion, Marsick and Watkins' (1996) theorize a learning organization as comprised of the people in it and the structures created by its social institution. A learning organization integrates these people and the structures to enable continuous learning and transformation. Yang et al.'s (2004) framework illustrates the importance of focus on people at the individual and group level. This framework advocates for facilitative structures that support and capture learning if an establishment is to become a learning organization. The applications and importance of these facilitative structures were described and validated by the interview participants (refer to Appendix G for Qualitative Data Analysis Supplemental Information).

Discussion

Insights

The quantitative findings demonstrated that of the management level categories, non-managers had the lowest mean scores for continuous learning opportunities (Dimension 1), inquiry and dialogue (Dimension 2), collaborative team learning (Dimension 3), unifying around a collective vision (Dimension 5), strategic leadership for learning (Dimensions 7), individual learning (Level 1), and encouraging collaborative team learning (Level 2). This finding is noteworthy since non-managers were almost half of the sample (46.7%). The non-managers are your front-line workers, the foot soldiers, so to speak. The non-managers represent the largest proportion of the organization, so it is worth investing in their learning and professional development. The organization's leadership should consider outreach strategies to this employee group to demonstrate value. Even if the disconnect is perceived rather than real, the employees and organization will benefit from investigating the issue further.

Executive level employees had the lowest mean scores for created systems and structures for shared learning (Dimension 4), the organization's connection to its environment (Dimension 6), and organizational level learning (Level 3). Although the executive level managers comprised only 1% of the study sample, their perceptions are just as important. The workplace that creates systems and structures for shared learning provides appropriate technology systems, integrates them with work, and maintains them to share learning. Additionally, all employees can access these systems and are trained to use them. Interestingly, executive-level managers had the lowest perceptions. An organization's connection to its environment typifies networking and partnerships with outside subject matter experts. It also represents the organization's relevance in the society. In the ideal work environment, the leadership help employees understand the effect

of their work on the entire enterprise. Employees use accessible information to adjust their work practices. Also, the organization is linked to its community through partnerships, networking, and events.

On the other hand, of the management level categories, senior level managers had the highest mean scores for collaborative team learning (Dimension 3), unifying around a collective vision (Dimension 5), the organization's connection to its environment (Dimension 6), strategic leadership for learning (Dimensions 7), collaborative team learning (Level 2), and organizational level learning (Level 3). Executive level employees had the highest mean scores for continuous learning opportunities (Dimension 1), inquiry and dialogue (Dimension 2), and individual learning (Level 1). Mid-level managers had the highest mean scores only for created systems and structures for shared learning (Dimension 4).

The findings also demonstrated employees' perceptions based on tenure (length of employment) with the organization. Table 12 presents these values for each dimension and level. Employees with 6 – 10 years of tenure demonstrated the lowest mean scores across all the dimensions and levels of a learning organization. Employees with 16 – 20 years of tenure demonstrated the highest mean scores across all the dimensions and levels of a learning organization. These observations in mean scores are aligned with the significant differences in perceptions observed in the data between employees with 6 to 10 years of tenure and those with 16 to 20 years. These significant differences were observed on three (3) constructs only: Inquiry and Dialogue (Dimension 2), Organization-Environment Connection (Dimension 6), and Individual Level learning (Level 1). The Eight (8) theme categories that emerged from the interview data, Leadership; motivation to learn; communication; expanded training; learning styles; workplace culture; mentoring & coaching; and team building, present probable

explanations for the observed differences in perceptions. These explanations may hold true regardless of their quantitative significance. Jarvis' conceptual model validates every employee's experience as authentic. Similarly, Dewey's pragmatic approach regards knowledge acquisition within the framework of action as its most basic category. To take relevant action, every voice must be heard. To take relevant action, all experiences must be considered equitably. While the questionnaire findings reveal where the differences in employee perceptions lie, the interview findings consider employee experiences to illuminate reasons why. The integrated findings are discussed here.

The study indicated tenure-based differences in perceptions on Inquiry & Dialogue, Dimension 2. This learning dimension refers to an organization's effort in creating a culture of questioning, feedback, and experimentation. The themes that emerged from the interviews suggested that communication and information sharing will improve learning. Employees expressed ignorance of existing learning resources. They explained that access to resources is sometimes dependent on how long an employee has been with the agency. Employees recommended clear, accessible, and universal communication to improve their learning. They also suggested that both informal and formal mentoring programs will foster their growth and development. This aligns with Olsen's (2016) discovery that organizations realize the greatest competitive advantage from informal unplanned learning events. The current study corroborated her findings on the importance of collaboration and networking for employee development. Similarly, Crouse et al.'s (2011) finding which indicated the strongest facilitator of learning in the workplace was informal learning emerged in this study. Employees mentioned conferences, team building events, and formal mentorship programs as effective learning vehicles. Another desirable strategy that they described was applied, hands-on training events. In this format, they

benefited from opportunities to apply what was taught directly to job tasks. This aligns with Jarvis' (2010) theory of learning by iterative action. Jarvis' adult learning model originated in research with over two hundred adult learners. His early work on the model was based on adult learners' research. It highlighted the critical role of experience in the learning process. He claims that all learning begins with experience. This finding also validates Dewey's (1938) approach of learning through experience. Additionally, Smith's (2011) findings substantiated findings in this study. She claimed adventurous learning was critical in workplace learning. She explained that "instruction must blend real experience (adventurous learning) with academic learning" (p.22). Additionally, employees expressed a desire for a robust training curriculum that expanded upon the basics needed to perform their job duties.

The study also indicated notable tenure-based differences in perceptions on Organization-Environment Connection, Dimension 6. This dimension reflects global thinking and actions to connect the organization to its internal and external environment. The themes that emerged from the interviews suggested the need for increased collaborations, connections, and networking both internally and externally. Employees described a work environment and culture that supported multi-lateral learning. They described experiencing increased professional growth when they could freely attend national and regional conferences. They indicated this allowed them to learn from subject matter experts and their peers in the industry. Additionally, increased networking with their peers would afford them added opportunities to apply their knowledge to real events in the workplace. This finding also aligned with Smith's (2011) finding on the invaluable contributions of real experience for effective workplace learning.

Lastly, there were notable tenure-based differences in perceptions on Individual Learning, Level 1. This connotes unique employee learning strategies, styles, and experiences.

Employees sometimes expressed being removed from the strategic plan development process. They desired to be included in the planning process and not only the implementation. They explained that including them would demonstrate their value to the organization. It would also increase employee's investment in the organization. Additionally, they recommended a more structured communication approach of the strategic plan. Employees described scenarios where they depended on others to share the organization's strategic plan with them. They explained that a universal awareness campaign will mitigate the risk of multiple interpretations of the organization's goals and objectives. They also advised the leadership to encourage collective adoption by engaging their front-line employees. Abbasi and Zamani-Miandashti's (2013) study revealed positive significant relationships between (i) transformational leadership and organizational learning culture; (ii) organizational learning culture and organizational learning; (iii) transformational leadership and organizational learning; (iv) and organizational learning and performance. Given their findings, it follows that the different employee perceptions observed in the current study is influenced by leadership style and the workplace learning culture.

So far, this discussion has highlighted supporting findings from prior research. However, there were observations from the current study that were not corroborated in prior studies I examined. The current study revealed differences in employee perceptions of learning based on tenure. This refers to how long the employee has worked for the organization. Although the notable differences were between only two of the five tenure categories, it is worth noting. Existing research examining the learning organization using the DLOQ considered its relevance in specific settings. They also considered factors that contribute to the sustainability of a learning organization. Additionally, prior research explored relationships between various attributes and the learning organization. Others examined the impacts of learning and the

learning organization on desired outcomes such as performance. There was no categorical finding that stated observed differences in employee perceptions about learning in the organization based on tenure. Employees alluded to these differences in narrating their experiences in the workplace. It appeared information flow was sporadic and dependent of the employee's job duties. This did not refer to classified information where confidentiality is expected. Employees described being unaware of some information about the organization's mission, vision, and strategies. I infer that the longer employees are with the agency, the privy they are to information they may otherwise have missed. It is also possible that with longer tenure comes promotions that increases inclusiveness in organizational planning events. While this is understandable, it also warrants that organizational leadership institute mechanisms to strategically include all employees in organizational initiatives. Without intentional outreach that targets employees of all management levels and tenure, information flow will be haphazard at best. The result will be a wide range of perceptions and experiences that impedes synergy, learning, and innovation. One finding was unequivocally clear across the body of research on adult learning, workplace learning, and the learning organization. It is the prevailing role of the leader in creating an optimal environment for learning. This finding was corroborated in the current study.

Recommendations

I firmly believe like Dewey (1938) and Jarvis (2004, 2006) that every experience matters. No individual's story should be overlooked. As such I present a summary of feedback and recommendations from the employees interviewed below.

Existing Strengths

Employees acknowledged that existing tools & resources are available for their learning. They mentioned access to educational websites, conferences, external training, on-the-job training, management courses, education initiatives, and external consultants. They also acknowledged in-depth policy documentation that informed their daily job tasks. Furthermore, some employees indicated they had access to job-specific learning events. Those in leadership positions recognized some leadership training already exists in the organization. Lastly, two employees were optimistic with the current leadership. They described them as inclined towards learning as they forged new connections to move the organization forward.

Improvement Opportunities

Employees offered these recommendations for improving their learning. These suggestions may have implications for improved organizational learning:

- i. Improve communication of strategic goals and objectives.
- ii. Provide access to learning resources enterprise wide.
- iii. Hire knowledgeable people as supervisors that can motivate others.
- iv. Establish formal and informal mentorships/mentoring programs.
- v. Expand leadership training to build trust between employees and leaders.
- vi. Focus on holistic employee care so employees feel valued.
- vii. Include hands-on, applied training formats in all training curriculums.
- viii. Encourage team cohesiveness through team building strategies.
- ix. Reduce high stress environments due to short-staffing and heavy workloads.
- x. Increase connections to the environment through networks with external experts.
- xi. Institute comprehensive communication channels for information exchange.

- xii. Increase salary to attract highly qualified specialized staff and improve retention.

Summary

The employees' perceptions and experiences demonstrate a need for deliberate action in the areas of leadership, communication, team building, training, mentoring and workplace culture. A learning organization is characterized by the structures its organizational leadership establishes and fosters for learning opportunities. Employees are the building block of an organization. When facilitative structures are present, employees feel empowered to harness varied learning opportunities in the workplace. They can readily problem solve with knowledge gained. The leadership demonstrates value of its human resources, the employees, by affording them formal and informal learning opportunities. Moreover, the leadership implements workplace processes that encourage networking and collaboration rather than competition. It fosters employee growth, trust, and confidence by correcting venial mistakes rather than punishing them. Additionally, it demonstrates its value for learning by allotting and allowing time on the job for it to occur. The leadership also demonstrates its regard for learning by celebrating and rewarding employee achievements. These strategies create an environment where employees feel valued. The employees feel invested in the organization. Such employees feel empowered to innovate and create. The employees have a sense of belonging knowing that they are a part of something larger than themselves. When employees are vested in the organization, they become problem solvers. When employees synergize in groups or teams, organizational learning happens. When organizational learning consistently occurs, the organization is innovative. When innovation happens, the establishment can be called a learning organization. A learning organization recognizes its most valued assets are its human resources, the employees, and intentionally invests in their learning, growth, and development. Given the

existing strengths in the organization, this agency can continue to grow and evolve—the marks of a learning organization.

Implications

My inspiration to examine employees' learning perceptions and experiences resulted from challenges I faced as a state of Georgia employee. I was not certain if those challenges were unique to me. While I had some anecdotal evidence and could deduce some contributors to the challenges, these ideas were not data driven. This study has provided me the opportunity to examine concrete data from employees like me. I am a vested state of Georgia employee with over fourteen years of tenure and counting. I consider my job as more than a paycheck. My career affords me the opportunity to serve and to create the world of inclusivity and equity I desire. I have the unique opportunity to facilitate projects that expand access to services for Georgia citizens. In the spirit of being a part of the solution in implementing the changes I would like to see, I embarked on this research inquiry. The research findings have real and relevant implications for me as a state employee.

Given Jarvis' claims that (i) all learning begins with experiencing; (ii) the individual's experiences are unique, authentic, yet shared with others; (iii) the individual's world is continually evolving; and (iv) his world is a byproduct of changes in the larger world and the learner's involvement in it (Jarvis, 2004; 2006), the differences in employees' perceptions and experiences are expected. Jarvis' model does not advocate for equal experiences, rather equitable ones. This state of Georgia government agency will benefit from measures that promote positive experiences for all its employees, even if they are varied. Similarly, a learning organization is consistently improving. Jarvis' model advocates for a larger world (environment) that positions the learner to attain his maximum potential in shared interactions with others. The findings of

the current study provide actionable recommendations for the learner (individual) and the organization.

It is evident there is a difference in perceptions between more tenured employees and their less tenured counterparts on individual learning experiences (Level 1), Inquiry & Dialogue (Dimension 2), and Organization-Environment Connection (Dimension 6). Employees provided some recommendations they believe will improve their learning individually and in teams. The learning organization framework suggests that it consists of the people and the facilitative structures in place to enhance learning. When the organization implements facilitative systems and structures, employees can learn. Consequently, when employees are learning and growing, the organization innovates.

The data overwhelmingly suggests that compassionate, authentic, and approachable leaders will foster an environment of trust, belonging, and inclusiveness. This will enhance open communication and dialogue, increase awareness and access to resources, and encourage meaningful exchange. The contribution of the leadership in creating this environment was striking. The data also revealed that leaders could intervene to mitigate several challenges employees encountered in the workplace.

These findings were corroborated by Hetland et al.'s (2011) study on leadership styles. Transformational leaders who inspire, motivate, support, and intellectually stimulate their staff positively influenced the learning climate. In contrast, passive-avoidant leaders negatively impacted learning outcomes. In alignment with employees' narratives, their findings also demonstrated the influence of leadership on perceptions of the workplace learning culture. In the current study, employees described an ideal workplace culture as one where the leader was invested in their learning. Hetland et al. (2011) characterized this as supportive culture for

learning. Choi and Jacobs' (2011) findings also highlighted supportive learning environments as learning influencers. Similarly, Abbasi and Zamani-Miandashti's (2013) study supported the finding from the current study. Transformational leaders were associated with a progressive organizational learning culture. Employees described desirable leadership traits that fostered a culture of learning to include relatability, transparency, trust, and empathy. This exemplifies transformational leaders who create and foster the culture of learning in the organization. It follows that the workplace culture then influences organizational learning. Therefore, the transformational leader's role in fostering a conducive learning culture than enables organizational learning cannot be overemphasized.

As with findings from the current study where employees linked learning opportunities to the supervisor, Abbasi and Zamani-Miandashtis (2013) reported a positive relationship between transformational leadership and organizational learning. This finding is supported by the influence the leader has on the workplace learning culture to promote or hinder learning events. Employees described situations where the leadership was not as open to them accessing external training and networking opportunities. They felt less empowered to learn in those situations than when the leadership facilitated the learning events. Employees also described feeling disconnected from the strategic vision such that organizational learning was not maximized. The extent to which they felt included in the planning and implementation of the organization's objectives also depended on the leadership structure. This aligns with the positive relationship between transformational leadership and organizational learning (Abbasi & Zamani-Miandashtis, 2013).

When organizational learning occurs, the members of the organization (employees, faculty, students etc.) acquire knowledge and develop skills. With this increased knowledge

comes improved performance. The current study inadvertently underscored the role of transformational leadership on organizational learning culture and organizational learning. I started this journey with the focused intention to examine employee perceptions of the learning organization. I continue with a better-informed scope. A learning organization recognizes its most valued assets are its human resources, the employees, and intentionally invests in their learning, growth, and development. A learning organization cannot be realized in the absence of transformational leadership.

The current study examined employees' perceptions of learning on the organizational level. Items in the questionnaire examined how employees perceived their connection to the organization and its environment. The interview exchange also sought to understand employee experiences with learning as a collective part of their organization. Employees shared their experiences learning with others in the workplace and offered recommendations for improvement.

Employees attributed the current positive work environment they were experiencing to the new leadership in place. It is also evident from the data that the leaders' role in the team is crucial. For this organization to continue the learning organization trajectory, it must examine its leaderships' impact on the work environment and culture. It must strategically position its leadership. It must make every effort to hire the right people in leadership positions. It also must focus on continued training for them. The organization will realize enormous gains with a focus on leadership. This focus has direct positive contributions for sustained employee learning. When employees learn, they may realize increased self-worth, self-actualization, well-being, and fulfillment. In turn, the agency may realize increased productivity, revenue, and employee

retention. Consequently, the organization will continue to transform itself and remain in the learning organization trajectory.

Suggestions for Further Research

The current study's findings pointedly highlighted the influence of leadership for employee learning. Additionally, it revealed the contributions of communication, team building, training, mentoring, and workplace culture in employee learning. Furthermore, it emphasized the roles employee motivation and learning style play for individual learning. Curious also is the significant differences in employee perceptions observed only between employees with 6 to 10 years of tenure and those with 16 to 20 years. These significant differences were observed on three (3) constructs: Inquiry and Dialogue (Dimension 2), Organization-Environment Connection (Dimension 6), and Individual Level learning (Level 1). It will be worth investigating conditions and experiences in these two tenure categories that warrants the significant differences in perceptions. Given these findings, the following is a list of research study recommendations that could augment the findings of this study. Additionally, they will add to the body of knowledge on learning and the learning organization:

- i. Examine the contributions of leadership style on learning.
- ii. Examine the contributions of employee motivation on learning.
- iii. Examine the contributions of employee learning styles on learning.
- iv. Examine the differences in learning perceptions based on tenure.
- v. Consider a sequential mixed methods design study. In this design, the researcher collects only qualitative or quantitative data in the first strand. The researcher then analyzes the data from the first strand. Subsequently, the researcher uses the

results from the first strand to frame questions for the second strand and collects additional data for further analysis.

- vi. Explore the influences of employees' highest education level on their motivation to learn.
- vii. Conduct an in-depth qualitative inquiry to further examine employee experiences. Possible questions in a future study could be, "How does your organization create continuous learning opportunities?" Another question may be, "How does your organization promote dialogue in the workplace?" These questions are directly aligned to Watkins and Marsick's (1993, 1996) learning organization framework and may afford a more comprehensive inquiry.
- viii. Conduct a focused comparative study of employees with 6-10 years and 16-20 years of tenure in this agency to examine causes and explanations for the differences in learning perceptions.

Assumptions, Limitations, and Delimitations

This research study assumed adult-learners (employees) in non-government settings differ from those in government settings. While some similarities are expected regardless of organization type, the researcher assumed there are traits unique to employees in the private sector that distinguish them from those in the public (government) sector. Furthermore, the researcher assumed Georgia state government agencies differ from one another and do not all share the same experiences, culture, and structure. The DLOQ instrument measured employees' perceptions. The findings and results presented in this study represent an aggregated examination of employees' perceptions and experiences based on self-report. The sampling methodology and data analysis process had bearings on the inferences and interpretations made.

The Georgia state government agency from which I recruited participants excluded others that may have different cultures and characteristics. Findings from this research study cannot be generalized to all Georgia state government agencies. I only included full-time employees of the agency in the sample population. I excluded contractors and part-time employee as they may not be provided the same learning opportunities. Only employees who satisfied the inclusion criteria were encouraged to participate.

Additionally, the DLOQ is not the only validated tool that examines the learning organization. I selected this instrument after a review of studies done in non-western countries of the world to evaluate its reliability. These studies (Kumar et al., 2016; Leufvén et al., 2015) found the DLOQ to be as effective in measuring the constructs of a learning organization as it was in the United States. While there may be other instruments that measure these constructs with similar reliability, the DLOQ appeared to be more pervasive. Additionally, the DLOQ relies on self-reported measures which bodes self-report bias. The tool does not in itself measure the variables of interest so there is heightened room for variability in employee accounts. Kim et al. (2015) claim that during the last two decades, researchers have reported problems with multicollinearity and a lack of discriminant validity of the DLOQ. They suggest that these limitations may prompt researchers and theorists to address the utility of the DLOQ and develop a more valid instrument to measure the learning organization culture. Also, as a cross-sectional study using the DLOQ, data collected at a single point in time is not robust enough to portray lasting employee learning perceptions as it does not reflect possible changes in behavior and perceptions over time. These limitations, however, present future research opportunities.

Finally, I focused the interview questions on learning experiences within the selected Georgia state government agency. This was intended to only include learning experiences

facilitated by this agency. Georgia state government employees may work in multiple agencies over their tenure. In this scenario, they may have varied learning experiences depending on the Georgia state government agency. Although I did not validate the participants' responses, I emphasized that they focus on their learning experiences at the current agency and not those of prior employment. The research study examined employee perceptions on the individual, team, and organizational levels of learning within their organization. It also examined employee learning experiences. Although the seven dimensions of the learning organization are distilled from the three higher level categories - individual, team, and organizational levels, the framing of the interview questions in the current study may not have fully afforded employees the opportunity to detail their experiences comprehensively and descriptively.

Additionally, the sampling scheme used for participant recruitment has implications for the findings and conclusions. Participants that completed the questionnaire randomly and conveniently volunteered. Additionally, the interview participants were randomly, purposefully, and conveniently selected. This suggests the possibility that participants in both strands could belong to a subset of employees more predisposed to share their learning perceptions and experiences. It is possible that employees who did not participate in either strand have different views from those observed in the data. Furthermore, the literature suggests that highly educated employees seek out formal learning opportunities more than their less educated peers. I did not collect this descriptive data for analysis. It would be useful to explore learning perceptions and experiences on this construct. Although race was not a construct of focus in the current study, the researcher should have utilized an all-inclusive racial categorization. This would have demonstrated sensitivity to how employees may self-describe. The broad 'Other' category not only limits exploration on race but lumps multiple races into one bucket. Similarly, the age

demographic should have been structured differently to require respondents select their actual age rather than an age range. In the current structure, I should have added over 85 years old to include participants that may fit that category. Future research will take these design limitations into account to allow for more comprehensive examination.

References

- Abbasi, E., & Zamani-Miandashti, N. (2013). The role of transformational leadership, organizational culture, and organizational learning in improving the performance of Iranian agricultural faculties. *High Education*, 66, 505–519. DOI 10.1007/s10734-013-9618-8
- Argyris, C., & Schön, D. (1974) *Theory in Practice: Increasing Professional Effectiveness*. Jossey-Bass, San Francisco
- Argyris, C., & Schön, D.A. (1978). *Organizational learning: A theory of action perspective*. San Francisco: Jossey-Bass.
- Amin & Cohendet P. (2004) *Architectures of Knowledge: firms, capabilities and communities*. Oxford University Press.
- Baiyin Yang, Watkins, K. E., & Marsick, V. J. (2004). The Construct of the Learning Organization: Dimensions, Measurement, and Validation. *Human Resource Development Quarterly*, 15(1), 31–55. <https://doi-org.ezproxy.gsu.edu/10.1002/hrdq.1086>
- Bates, R., & Coyne, T. H. (2005). *Effective Evaluation of Training: Beyond the Measurement of Outcomes*. ERIC.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238–246.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.

- Biesta, G.J.J., & Burbles, N. C. (2003). *Pragmatism and Educational Research*. Lanham, MD: Rowman & Little Publishers.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.
- Bollen, K. A., & Long, J. S. (Eds.). (1993). *Testing structural equation models*. Thousand Oaks, CA: Sage.
- Boyer, D., & Centre for Economic, S. I. L. (England). (2000). *Boosting Adult Learning. Working Brief*.
- Bradford, S. K., Rutherford, B. N., & Friend, S. B. (2017). The impact of training, mentoring, and coaching on personal learning in the sales environment. *International Journal of Evidence Based Coaching & Mentoring*, 15(1), 133–151.
- Browne, M. W., & Cudeck, R. (1993). *Alternative ways of assessing model fit*. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation model* (pp. 136–162). Thousand Oaks, CA: Sage.
- Can an Ordinal Likert Scale be a Continuous Variable?* (n.d.). Statistics solutions. Retrieved July 15, 2021, from <https://www.statisticssolutions.com/can-an-ordinal-likert-scale-be-a-continuous-variable/>
- Cohen, D. K., & National Center for Research on Teacher Education, E. L. M. (1988). *Teaching Practice: Plus Ca Change... Issue Paper 88-3*.
- Cozby, P.C., & Bates, S.C. (2015). *Methods in Behavioral Research (12th Edition)*. New York: McGraw Hill.

- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52, 281–302.
- Crouse, P., Doyle, W., & Young, J. D. (2011). Workplace learning strategies, barriers, facilitators, and outcomes: a qualitative study among human resource management practitioners. *Human Resource Development International*, 14(1), 39–55.
- D'Amico, D. (2011). Providing Worker Education and Building the Labor Movement: The Joseph S. Murphy Institute of City University of New York. *Adult Learning*, 12-16.
- Davis, D., & Daley, B. J. (2008). The learning organization and its dimensions as key factors in firms' performance. *Human Resource Development International*, 11(1), 51–66.
- Decuir-Gunby, Jessica T., & Schutz, Paul A. (2017). *Developing a mixed methods proposal: a practical guide for beginning researchers (First Edition)*. Thousand Oaks, CA: SAGE Publications, Inc.
- Dewey, J. (1944). *Democracy and education: An introduction to the philosophy of education*. New York: The Free Press.
- Dewey, J. (1938). *Experience and education*. New York: Collier Books.
- Enos, M. D., Kehrhahn, M. T., & Bell, A. (2003). Informal learning and the transfer of learning: How managers develop proficiency. *Human Resource Development Quarterly*, 14(4), 369–387.
- Eraut, M. (2004). Informal Learning in the Workplace, *Studies in Continuing Education*, Vol. 26(2), 247-273.

- Fleishman, J., & Benson, J. (1987). Using LISREL to evaluate measurement models and scale reliability. *Educational and Psychological Measurement*, 47, 925–939.
- Freire, P. (2000). *Pedagogy of the oppressed (20th anniversary ed.)*. New York: Continuum.
- Froehlich, D., Segers, M., & Van den Bossche, P. (2014). Informal workplace learning in Austrian banks: The influence of learning approach, leadership style, and organizational learning culture on managers' learning outcomes. *Human Resource Development Quarterly*, 25(1), 29-57.
- Glass, R. D., Morton, J. M., King, J. E., Krueger-Henney, P., Moses, M. S., Sabati, S., & Richardson, T. (2018). The Ethical Stakes of Collaborative Community-Based Social Science Research. *Urban Education*, 53(4), 503–531.
- Grbich, C. (2013). *Qualitative Data Analysis. An Introduction (2nd edition)*. Thousand Oaks: SAGE.
- Hager, P. (2004). The conceptualization and measurement of learning at work. In H. Rainbird, A. Fuller, & A. Munro (Eds.), *Workplace learning in context*, 242–258.
- Hetherington, S. (2012). *Epistemology: The Key Thinkers*. Continuum.
- Hetland, H., Skogstad, A., Hetland, J., & Mikkelsen, A. (2011). Leadership and Learning Climate in a Work Setting. *European Psychologist*, 16(3), 163–173.
- Hoaglin, D.C., Iglewicz, B., & Tukey, J.W. (1986). Performance of some resistant rules for outlier labeling. *Journal of American Statistical Association*, 81, 991-999.

- Hoaglin, D. C., and Iglewicz, B. (1987). Fine tuning some resistant rules for outlier labeling. *Journal of American Statistical Association*, 82, 1147-1149.
- Hoffman, N., & Jobs for the Future. (2015). Let's Get Real: Deeper Learning and the Power of the Workplace. Deeper Learning Research Series. Policy Bulletin. In Jobs for the Future. Jobs For the Future.
- How2Stats. (2011, September 8). *The Right Way to Detect Outliers - The Outlier Labeling Rule* [Video 2:53]. YouTube. <https://www.youtube.com/watch?v=bRdC1u9veg8>
- J. M. Huber Institute for Learning in Organizations. (2002). *Strategic organizational learning: How innovative companies use learning to address business challenges (Report to participating companies)*. New York, Teachers College, Columbia University.
- Jacobs, R. L. (2006). Perspectives on adult education, human resource development, and the emergence of workforce development. *New Horizons in Adult Education and Human Resource Development*, 20(1), 21–31.
- Jarvis, P. (2010). *Adult Education and Lifelong Learning: Theory and Practice*. Taylor & Francis Group. ProQuest Ebook Central.
<https://ebookcentral.proquest.com/lib/gsu/detail.action?docID=1099356>.
- Jarvis, P. (2014) From adult education to lifelong learning and beyond. *Comparative Education*, 50(1), 45-57. DOI: 10.1080/03050068.2013.871832
- Jarvis, P., Holford, J., & Griffin, C. (2003). *The Theory and Practice of Learning: Vol. 2nd ed.* Routledge.

- Johnson, D.R., & Creech, J.C. (1983). Ordinal measures in multiple indicator models: A simulation study of categorization error. *American Sociological Review*, 48, 398-407.
- Jöreskog, K. G., & Sörbom, D. (1989). *LISREL 7: A guide to the program and applications (2nd ed.)*. Chicago: SPSS Inc.
- Kim, J., Egan, T., & Tolson, H. (2015). Examining the Dimensions of the Learning Organization Questionnaire: A Review and Critique of Research Utilizing the DLOQ. *Human Resource Development Review*, 14(1), 91–112. <https://doi.org/10.1177/1534484314555402>
- Kirby, J. R., Knapper, C. K., Evans, C. J., Carty, A. E., & Gadula, C. (2003). Approaches to learning at work and workplace climate. *International Journal of Training & Development*, 7(1), 31. doi:10.1111/1468-2419.00169
- Koopmans, H., Doornbos, A. J., & Van Eekelen, I. M. (2006). Learning in interactive work situations: it takes two to tango; why not invite both partners to dance? *Human Resource Development Quarterly*, 17(2), 135–158.
- Kumar, J. K., Gupta, R., Basavaraj, P., Singla, A., Prasad, M., Pandita, V., Vashishtha, V. (2016). An Insight into Health Care Setup in National Capital Region of India using Dimensions of Learning Organizations Questionnaire (DLOQ)- A Cross-Sectional Study. *Journal of Clinical & Diagnostic Research*, 10(6), 1–5.
- Kvale, S. (2008). *Doing Interviews. Qualitative Research Kit (1st edition)*. Thousand Oaks: SAGE.

- Kyndt, E., Govaerts, N., Verbeek, E., & Dochy, F. (2014). Development and validation of a questionnaire on informal workplace learning outcomes: A study among socio-educational care workers. *British Journal of Social Work, 44*(8), 2391-2410.
- Ladyshefsky, R., & Taplin, R. (2017). Employee perceptions of managerial coaching and work engagement using the Measurement Model of Coaching Skills and the Utrecht Work Engagement Scale. *International Journal of Evidence Based Coaching & Mentoring, 15*(2), 25–42.
- Leufvén, M., Vitrakoti, R., Bergström, A., Ashish, K.C., & Målqvist, M. (2015). Dimensions of Learning Organizations Questionnaire (DLOQ) in a low-resource healthcare setting in Nepal. *Health Research Policy and Systems, 13*(6), 2 - 8. <http://www.health-policy-systems.com/content/13/1/6>
- Little, J., & Swayze, S. (2015). Employee Perceptions of Psychological Capital and Learning Organization Dimensions in a Community Medical Center. *Organization Development Journal, 33*(2), 79–102.
- Lohman, M. C. (2005). A survey of factors influencing the engagement of two professional groups in informal workplace learning activities. *Human Resource Development Quarterly, 16*(4), 501–527.
- Lorenz, E. & Lundvall, B. (2011) Accounting for creativity in the European Union: a multi-level analysis of individual competence, labour market structure, and systems of education and training. *Cambridge Journal of Economics, 35*, 269–294.

- Lundvall, B.A. (1992). *National Systems of Innovation: towards a theory of innovation and interactive learning*. London: Pinter Publishers.
- Lundvall, B.A., & Johnson, B. (1994) The learning economy. *Journal of Industry Studies*, 1(2), 23–42.
- Marsick, V. J. (1988). Learning in the workplace: The case for reflectivity and critical reflectivity. *Adult Education Quarterly*, 38, 187-198.
- Marsick, V. J., & Watkins, K. E. (1997). Dimensions of Learning Organizations Questionnaire [Database record]. *PsycTESTS*. <http://dx.doi.org/10.1037/t43934-000>
- Marsick, V.J., & Watkins, K, E, (1999), *Facilitating learning organizations: Making learning count*. Aldershot, England: Gower.
- Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: The Dimensions of Learning Organizations Questionnaire. *Advances in Developing Human Resources*, 5, 132-151.
- Marsick, V. J. (2013). The Dimensions of a Learning Organization Questionnaire (DLOQ): Introduction to the Special Issue Examining DLOQ Use Over a Decade. *Advances in Developing Human Resources*, 15(2), 127–132. <https://doi.org/10.1177/1523422313475984>
- Maslow, A. H. (1998). *Maslow on management*. New York: Wiley.
- McKay, E., & Vilela, C. (2011). Corporate Sector Practice Informs Online Workforce Training for Australian Government Agencies: Towards Effective Educational-Learning Systems Design. *Australian Journal of Adult Learning*, 51(2), 302-328.

- Merriam, Sharan B., & Bierema, Laura L. (2013). *Adult Learning: Linking Theory and Practice*. John Wiley & Sons, Incorporated. ProQuest Ebook Central. <https://ebookcentral-proquest-com.ezproxy.gsu.edu/lib/gsu/detail.action?docID=1376941>.
- Merriam, S., Caffarella, R., & Baumgartner, L. (2007). *Learning in Adulthood: A Comprehensive Guide (3rd edition)*. San Francisco, CA: Jossey Bass.
- Minium, E.W., Clarke, R.B., & Coladarci, T. (1998). *Elements of Statistical Reasoning (2nd edition)*. New York, NY: John Wiley & Sons, Inc.
- Mocker, D. W., Spear, G. E., & ERIC Clearinghouse on Adult, C. and V. E. C. O. (1982). Lifelong Learning: Formal, Nonformal, Informal, and Self-Directed. Information Series No. 241.
- Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-creating Company: how Japanese companies create the dynamics of innovation*. Oxford: Oxford University Press.
- Norman, G. (2010). Likert scales, levels of measurement and the “laws” of statistics. *Advances in Health Sciences Education*, 15(5), 625-632. Retrieved from: <https://link.springer.com/article/10.1007%2Fs10459-010-9222-y#citeas>.
- Nunnally, J.C. (1976) *Psychometric Theory (1st edition)*. New York: McGraw-Hill.
- Olsen, D. S. (2016). Adult Learning in Innovative Organisations. *European Journal of Education*, 51(2), 210 – 226
- One-way ANOVA. (n.d.). Laerd Statistics. Retrieved July 15, 2021, from <https://statistics.laerd.com/statistical-guides/one-way-anova-statistical-guide-2.php>

- Onwuegbuzie, A. J., & Collins, K. M. (2007). a typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 12(2), 281-316. Retrieved from <http://nsuworks.nova.edu/tqr/vol12/iss2/9>
- Onwuegbuzie, A. J., & Leech, N. L. (2005c). The role of sampling in qualitative research. *Academic Exchange Quarterly*, 9, 280-284.
- Ortenblad, A. (2002). A typology of the idea of learning organization. *Management Learning*, 33, 213-230.
- Parker, P., Hall, D. T., Kram, K. E., & Wasserman, I. C. (2020). *Peer Coaching at Work: Principles and Practices*. Stanford Business Books.
- Quintero, L., & Tuckett, A. (2007). Different battleground, new advocacy tactics: A decade of adult learning in England. *Convergence*, 40(3/4), 71-82.
- Richter, D., & Paretti, M. (2009). Identifying barriers to and outcomes of interdisciplinarity in the engineering classroom. *European Journal of Engineering Education*, 34(1), 29–45.
- Rowden, R. W. (2007). *Workplace learning: Principles and practice*. Malabar, FL: Krieger Publishing.
- Saldana, J. (2013). *The Coding Manual for Qualitative Researchers (2nd edition)*. Thousand Oaks, California: Sage.

- Schaffer, S., & Chen, X. (2009). *Cross-disciplinary team learning: Assessment guidelines* [Conference Session]. EPICS Annual Conference on Service-Learning in Engineering and Computing, Austin, TX.
- Schon, D. A. (1987). *Educating the reflective practitioner*. New York: Basic Books.
- Schwandt, T. A. (2015). *The SAGE dictionary of qualitative inquiry (Fourth edition.)*. SAGE.
- Scott, P. S., Xiaojun, C., Xiumei, Z., and William, C. O. (2012). Self-Efficacy for Cross-Disciplinary Learning in Project-Based Teams. *Journal of Engineering Education*, vol. 101(1), 82–94.
- Smith, R. L. (2011). Front-Line Facilitating: Negotiating Adventurous Learning within Workplace Programs. *Adult Learning*, 18-22.
- Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25, 173–180.
- Sullivan, G. & Artino Jr., A. R. (2013). Analyzing and Interpreting Data from Likert-Type Scales. *Journal of Graduate Medical Education*. 5(4), 541-542.
- Taylor, J.E. (2010). Facilitator as Mediator: Mediating the Tension between Management and Employee-Learners. *Adult Learning*, 21(1-2), 19 – 25.
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks, CA: SAGE Publications, Inc.

Teknomo, K. (n.d.). *Data Analysis from Questionnaires*. Revoledu.

<https://people.revoledu.com/kardi/tutorial/Questionnaire/>

Tukey, J.W. (1977). *Exploratory Data Analysis*. Reading, MA: Addison-Wesley.

Tynjälä, P. (2008). Perspectives into learning at the workplace. *Educational Research Review*, 3, 130-154.

United States Accountability Office. (2010). Diverse federal and state efforts to support adult English language learning could benefit from more coordination. *Journal of Communications Research*, 2(4), 293-342.

Van der Sluis, L. E., & Poell, R. F. (2003). The Impact on Career Development of Learning Opportunities and Learning Behavior at Work. *Human Resource Development Quarterly*, 14(2), 159-179.

Watkins, K. (1992). Many voices: Human resource development from different disciplines. *Adult Education Quarterly*, 41, 241-255.

Watkins, K. E., & Marsick, V. J. (1993). *Sculpting the learning organization: Lessons in the art and science of systemic change*. San Francisco: Jossey-Bass.

Watkins K.E, Marsick V.J. (1996). *In Action: Creating the Learning Organization*. Alexandria, VA: American Society for Training and Development.

Wertz, F.J. (2005). Phenomenological research methods for counseling psychology. *Journal of Counseling Psychology*, 52(2), 167-177.

Woojae, C., Ronald, L. J. (2011). Influences of formal learning, personal learning orientation, and supportive learning environment on informal learning. *Human Resource Development Quarterly*, vol. 22(3), 239-257.

Wuestewald, T. (2016). Adult learning in Executive Development Programs. *Adult Learning*, 27(2), 68-75.

Yang B. (2003). Identifying valid and reliable measures for dimensions of a learning culture. *Advanced Development Human Resource*, 5(2), 152–62.

Yang, B., Watkins, K. E., & Marsick, V. J. (2004). The Construct of the Learning Organization: Dimensions, Measurement, and Validation. *Human Resource Development Quarterly*, vol. 15(1), 31 – 55.

Yoonhee, P., Ronald, L. J. (2011). The Influence of Investment in workplace learning on learning outcomes and organizational performance. *Human Resource Development Quarterly*, vol. 22(4), 437-458.

Zach. (2020, June 1). *How to Perform Levene's Test in SPSS*. Statology.
<https://www.statology.org/levenes-test-spss/>

Zumbo, B. D., & Zimmerman, D. W. (1993). Is the selection of statistical methods governed by level of measurement? *Canadian Psychology*, 34, 390-400.

APPENDICES

Appendix A

Demographic Questions

Georgia State University
College of Education & Human Development
Demographic & Supplemental Questions

1. What gender do you identify with? Male, Female, Other, I don't want to disclose
2. How do you identify racially? (Black/African American, White/Caucasian, Asian, Latino, American Indian, Other, etc.)
3. How old are you? (Drop down boxes ranging from 18-100)
4. Have you worked with another state government agency other than this one? (Yes, No)
5. Number of years with this Georgia State Government Agency: 0 – 5, 6 – 10, 10 and greater
6. What is your management level? (Non-managerial, mid-level manager, senior-level manager, executive leadership/c-level manager). For the purpose of this study;
 - a. Non-managerial means...
 - b. Mid-level manager means...
 - c. Senior-level manager means...
 - d. Executive Leadership/C-Level manager means...
7. Would you be interested in participating in a 45-minute long interview to share your learning experiences in this workplace? (Yes, No)
 - a. If Yes, please provide Name, Email Address, Phone #

Appendix B

DLOQ Instrument

Dimensions of Learning Organizations Questionnaire

Version Attached: Full Test

PsycTESTS Citation:

Marsick, V. J., & Watkins, K. E. (1997). Dimensions of Learning Organizations Questionnaire [Database record]. Retrieved from PsycTESTS. doi: <http://dx.doi.org/10.1037/t43934-000>

Instrument Type:

Inventory/Questionnaire

Test Format:

The DLOQ is comprised of 55 main items. The majority of the items are measured for frequency on a six-point scale ranging from 1 (Almost Never) to 6 (Almost Always).

Source: Supplied by Author.

Original Publication:

Marsick, Victoria J., & Watkins, Karen E. (2003). Demonstrating the Value of an Organization's Learning Culture: The Dimensions of the Learning Organization Questionnaire. *Advances in Developing Human Resources*, Vol 5(2), 132-151. doi: 10.1177/1523422303005002002

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PsycTESTS™ is a database of the American Psychological Association

Dimensions of the Learning Organization Questionnaire Self-Scoring Version by Karen E. Watkins and Victoria J. Marsick (1997)

DIMENSIONS OF THE LEARNING ORGANIZATION QUESTIONNAIRE

Developed by Karen E. Watkins and Victoria J. Marsick¹

A learning organization is one that learns continuously and transforms itself Learning is a

continuous, strategically used process — integrated with and running parallel to work.

In the last decade, organizations have experienced wave after wave of rapid transformation as global markets and external political and economic changes make it impossible for any business or service whether private, public, or nonprofit to cling to past ways of doing work. A learning organization arises from the total change strategies that institutions of all types are using to help navigate these challenges.

Learning organizations proactively use learning in an integrated way to support and catalyze growth for individual workers, teams and other groups, entire organizations, and (at times) the institutions and communities with which they are linked.

In this questionnaire, you are asked to think about how your organization supports and uses learning at an individual, team and organizational level. From this data, you and your organization will be able to identify the strengths you can continue to build upon and the areas of greatest strategic leverage for development toward becoming a learning organization.

Please respond to each of the following items. For each item, determine the degree to which this is something that is or is not true of your organization. If the item refers to a practice that rarely or never occurs, score it a one [1]. If it is almost always true of your department or work group, score the item a six [6]. Fill in your response by marking the appropriate number on the answer sheet provided.

Example: In this example, if you believe that leaders often look for opportunities to learn, you might score this as a four [4] by filling in the 4 on the answer sheet provided.

Question

In my organization, leaders continually look for opportunities to learn.

Almost Never

Almost Always

1

2

3

4

5

6

There are no right or wrong answers. We are interested in your perception of where things are at this time.

Thank you for completing this survey.

1 © 1997 Karen E. Watkins & Victoria J. Marsick. All rights reserved. Reprinted in Marsick, Victoria J., & Watkins, Karen E. (2003). *Demonstrating the Value of an Organization's Learning Culture: The Dimensions of the Learning Organization Questionnaire*. *Advances in Developing Human Resources*, Vol 5(2), 132-151. doi: 10.1177/1523422303005002002 This questionnaire is based on books by Karen Watkins and Victoria Marsick: *Sculpting the Learning Organization*, San Francisco: Jossey-Bass, Inc., 1993; and *In Action: Creating the Learning Organization*, Alexandria, VA: ASTD Press, 1996.

Almost Never

Almost Always

1

2

3

4

5

6

Individual Level

1. In my organization, people openly discuss mistakes in order to learn from them.
2. In my organization, people identify skills they need for future work tasks.
3. In my organization, people help each other learn.
4. In my organization, people can get money and other resources to support their learning.
5. In my organization, people are given time to support learning.
6. In my organization, people view problems in their work as an opportunity to learn.
7. In my organization, people are rewarded for learning.
8. In my organization, people give open and honest feedback to each other.
9. In my organization, people listen to others' views before speaking.
10. In my organization, people are encouraged to ask "why" regardless of rank.
11. In my organization, whenever people state their view, they also ask what others think.
12. In my organization, people treat each other with respect.
13. In my organization, people spend time building trust with each other.

Team or Group Level

Almost Never

Almost Always

1

2

3

4

5

6

14. In my organization, teams/groups have the freedom to adapt their goals as needed.
15. In my organization, teams/groups treat members as equals, regardless of rank, culture, or other differences.
16. In my organization, teams/groups focus both on the group's task and on how well the group is working.
17. In my organization, teams/groups revise their thinking as a result of group discussions or information collected.
18. In my organization, teams/groups are rewarded for their achievements as a team/group.

19. In my organization, teams/groups are confident that the organization will act on their recommendations.

Organization Level

Almost Never

Almost Always

1

2

3

4

5

6

20. My organization uses two-way communication on a regular basis, such as suggestion systems, electronic bulletin boards, or town hall/open meetings.
21. My organization enables people to get needed information at any time quickly and easily.
22. My organization maintains an up-to-date data base of employee skills.
23. My organization creates systems to measure gaps between current and expected performance.
24. My organization makes its lessons learned available to all employees.
25. My organization measures the results of the time and resources spent on training.
26. My organization recognizes people for taking initiative.
27. My organization gives people choices in their work assignments.
28. My organization invites people to contribute to the organization's vision.
29. My organization gives people control over the resources they need to accomplish their work.
30. My organization supports employees who take calculated risks.
31. My organization builds alignment of visions across different levels and work groups.
32. My organization helps employees balance work and family.
33. My organization encourages people to think from a global perspective.
34. My organization encourages everyone to bring the customers' views into the decision-making process.
35. My organization considers the impact of decisions on employee morale.
36. My organization works together with the outside community to meet mutual needs.
37. My organization encourages people to get answers from across the organization when solving problems.
38. In my organization, leaders generally support requests for learning opportunities and training.
39. In my organization, leaders share up to date information with employees about competitors, industry trends, and organizational directions.

- 40. In my organization, leaders empower others to help carry out the organization's vision.
- 41. In my organization, leaders' mentor and coach those they lead.
- 42. In my organization, leaders continually look for opportunities to learn.
- 43. In my organization, leaders ensure that the organization's actions are consistent with its values.

We use the metaphor of sculpting to describe what organizations must do to become learning organizations. Michelangelo spoke of sculpting as chipping away that which does not belong to the essence within the material that is sculpted: The best artist has no concept which some single marble does not enclose within its mass, but only the hand which obeys the intelligence can accomplish that. . . . Taking away . . . brings out a living figure in alpine and hard stone, which . . . grows the more as the stone is chipped away. The sculptor of the learning organization has to see in her mind's eye, and shape structures toward, that which nurtures learning and then create, sustain, or alter existing approaches to foster this capacity. She will chip away at all of the existing systems, attitudes, and practices which thwart learning. (from Karen Watkins and Victoria Marsick (1993) Sculpting the Learning Organization,)

Measuring Learning Organization Results at the Organizational Level

In this section, we ask you to reflect on the relative performance of the organization. You will be asked to rate the extent to which each statement is accurate about the organization's current performance when compared to the previous year. There are no right or wrong answers. We are interested in your perception of current performance. For example, if the statement is very true of your organization, fill in a [5] on the answer sheet provided.

Almost Never Almost Always

1 2 3 4 5 6

- 44. In my organization, return on investment is greater than last year
- 45. In my organization, average productivity per employee is greater than last year.
- 46. In my organization, time to market for products and services is less than last year.
- 47. In my organization, response time for customer complaints is better than last year.
- 48. In my organization, market share is greater than last year.
- 49. In my organization, the cost per business transaction is less than last year
- 50. In my organization, customer satisfaction is greater than last year.
- 51. In my organization, the number of suggestions implemented is greater than last year.

52. In my organization, the number of new products or services is greater than last year.
53. In my organization, the percentage of skilled workers compared to the total workforce is greater than last year.
54. In my organization, the percentage of total spending devoted to technology and information processing is greater than last year.
55. In my organization, the number of individuals learning new skills is greater than last year.

Additional Information about You and Your Organization

In this section, fill in the number on the answer sheet which corresponds to the answer which best describes you or your organization. The answer sheet has space for up to ten options. Please mark your response accurately.

56. What is your role?

1. Management
2. Non-Management Technical/Professional
3. Non-Management [Hourly Employee]
4. Other _____

57. What is your educational experience?

1. did not complete high school
2. high school graduate
3. undergraduate degree
4. graduate degree

58. How many employees are in your organization?

1. 0 - 200
2. 201-500
3. 501-1,000
3. 1,001-10,000

4. 10,001-50,000

5. over 50,000

59. Type of organization?

1. Manufacturing

2. Service

3. Government

4. Non-Profit

5. Educational

60. Your organization's annual revenue?

1. under \$2 million

2. \$2-25 million

3. \$26-99 million

4. over \$1 billion

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Appendix C

Interview Questions

1. Describe your learning experiences at this agency?
2. How does this organization help you learn as an individual?
3. What learning initiatives would you consider instrumental to learning in your organization?
4. How would you describe an environment conducive to your learning effectively?
4. What does team learning look like in your organization?
5. How can team learning and collaboration be improved in your organization?
6. What changes could be implemented to help your team learn better?
6. How does your organization communicate its strategic objectives with you?
7. How could the organization better communicate its mission, goals, and strategic objectives, and plans with you?
10. What additional insights would you like to share about learning on the individual, team, and organizational level in this agency?

Appendix D

Informed Consent Forms

Georgia State University

Informed Consent

Title: Exploring Dimensions of the Learning Organization and Learning Experiences in a Georgia State Government Agency.

Principal Investigator: Janice B. Fournillier, Ph.D.

Student Principal Investigator: Olufunmilayo Adesesan

Purpose

The purpose of the proposed research study is to examine the dimensions of a learning organization as perceived by adult-learner-workers (employees) in a Georgia state government agency. It also seeks to understand how employees learn in this environment. You are invited to take part in this research study because you are a full-time employee or staff of Georgia Department of URANUS. A total of 7 people will be invited to take part in this interview study.

Procedures

If you decide to take part, you will participate in face-to-face interview that will take place at a place and time that you find convenient, comfortable, and free of distractions. We will audio tape the interview so that none of the information you provide is missed, misrepresented, or lost. During the interview, the researcher will ask about 10 about how you learn at work. We expect this interview to take about 45 minutes but could last a little longer if you have more to share.

Future Research

We will remove information that may identify you and may use your data for future research. If we do this, we will not ask for any additional consent for you.

Risks

In this study, you will not have any more risks than you would in a normal day of life.

Benefits

This study is not designed to benefit you personally. Overall, we hope to learn about how adults learn in the workplace and what contributes to the learning process. These lessons could be helpful to you and future employees or staff of GA Uranus.

Voluntary Participation and Withdrawal

You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions or stop participating at any time. You may refuse to take part in the study or stop at any time, this will not cause you to lose any benefits on the job or from the researchers.

Confidentiality

We will keep your records private to the extent allowed by law. The following people and entities will have access to the information you provide:

- Dr. Janice B. Fournillier, Principal Investigator
- Olufunmilayo Adesesan, Student Principal Investigator
- GSU Institutional Review Board
- Office for Human Research Protection (OHRP)

The audio recorder used will have a password that only the research team know. No one outside the team will be able to listen to the interview recording. When we write out the recording of the interview, we will store and save it in a password- and firewall-protected computer that only the research team can access. We will use a study number and codes we make up instead of your name on any study records. The sheet that has the fake codes we link to your name will be stored in a different device and location from other documents that identify you. This will greatly decrease the chance that anyone outside of the research team can identify you. Any communication that is sent through the internet will be encrypted (coded) for your privacy. We will not be collecting your IP address as part of this study. If any document is printed, it will be stored in a locked cabinet or briefcase. When we present or publish the results of this study, we will not use your name or other information that may identify you.

Contact Information

Contact Dr. Janice Fournillier at 404-413-8262 or jfournillier@gsu.edu and Olufunmilayo Adesesan> at 770-362-5908 and oadesesan1@student.gsu.edu

If you have questions about the study or your part in it

If you have questions, concerns, or complaints about the study

If you think you have been harmed by the study

Contact the GSU Office of Human Research Protections at 404-413-3500 or irb@gsu.edu

if you have questions about your rights as a research participant

if you have questions, concerns, or complaints about the research

Consent

We will give you a copy of this consent form to keep.

If you are willing to volunteer for this research, please sign below.

Printed Name of Participant

Signature of Participant

Date

Principal Investigator or Researcher Obtaining Consent

Date

Georgia State University

Informed Consent

Title: Exploring Dimensions of the Learning Organization and Learning Experiences in a Georgia State Government Agency.

Principal Investigator: Janice B. Fournillier, Ph.D.

Student Principal Investigator: Olufunmilayo Adesesan

Purpose

The purpose of the proposed research study is to examine the dimensions of a learning organization as perceived by adult-learner-workers (employees) in a Georgia state government agency. It also seeks to understand how employees learn in this environment. You are invited to take part in this research study because you are a full-time employee or staff of Georgia Department of URANUS.

Procedures

If you decide to take part, you will complete a questionnaire of 50 questions that you will access through a private link I will provide you with on the internet. You will be asked a series of questions regarding your learning approach, your thoughts on the agency's learning environment, and your thoughts of your own job performance and career growth. I expect that participation will take only 20 -30 minutes of your time from start to finish.

Future Research

We will remove information that may identify you and may use your data for future research. If we do this, we will not ask for any additional consent for you.

Risks

In this study, you will not have any more risks than you would in a normal day of life.

Benefits

This study is not designed to benefit you personally. Overall, we hope to learn about how adults learn in the workplace and what contributes to the learning process. These lessons could be helpful to you and future employees or staff of GA Uranus.

Voluntary Participation and Withdrawal

You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions or stop participating at any time. You may refuse to take part in the study or stop at any time, this will not cause you to lose any benefits on the job.

Confidentiality

We will keep your records private to the extent allowed by law. The following people and entities will have access to the information you provide:

- Dr. Janice B. Fournillier, Principal Investigator
- Olufunmilayo Adesesan, Student Principal Investigator
- GSU Institutional Review Board
- Office for Human Research Protection (OHRP)

We will use a study number and codes instead of your name on study records. The information you provide will be stored in password- and firewall-protected computer. Any communication that is sent through the internet will be encrypted (coded) for your privacy. We will not be collecting your IP address as part of this study. If any document is printed, it will be stored in a locked cabinet or briefcase. When we present or publish the results of this study, we will not use your name or other information that may identify you.

Contact Information

Contact Dr. Janice Fournillier at 404-413-8262 or jfournillier@gsu.edu and Olufunmilayo Adesesan at 770-362-5908 and oadesesan1@student.gsu.edu

- If you have questions about the study or your part in it
- If you have questions, concerns, or complaints about the study

- If you think you have been harmed by the study

Contact the GSU Office of Human Research Protections at 404-413-3500 or irb@gsu.edu

- if you have questions about your rights as a research participant
- if you have questions, concerns, or complaints about the research

Consent

We will give you a copy of this consent form to keep.

If you are willing to volunteer for this research, please sign below.

Printed Name of Participant

Signature of Participant

Date

Principal Investigator or Researcher Obtaining Consent

Date

Appendix E

Invitation to Participate in Research Study

Georgia State University
College of Education & Human Development
Invitation to Participate in Research Study

Good Morning/Afternoon:

My name is Olufunmilayo (Funmi) Adesesan. I am a doctoral student at Georgia State University. As part of my program, I intend to conduct a research study that seeks to explore how adult-learner-workers (employees and staff) of NAME OF AGENCY HERE navigate learning and to investigate how the characteristics of a learning organization apply to it.

I invite you to participate in a face-to-face interview that will take place at a place and time that you find convenient, comfortable, and free of distractions. We will audio tape the interview so that none of the information you provide is missed or lost. During the interview, the researcher will ask 10 – 20 questions about how you learn at work. We expect this interview to take about 45 minutes but could last about 15-30 minutes longer if you have more to share. The findings of this study may be helpful for your agency. If you are interested in participating in this interview, please contact the student principal investigator at oadesesan1@student.gsu.edu

Thank you.

Georgia State University
College of Education & Human Development
Invitation to Participate in Research Study

Good Morning/Afternoon:

My name is Funmi Adesesan. I am a doctoral student at Georgia State University. As part of my program, I intend to conduct a research study that seeks to explore how adult-learner-workers (employees and staff) of NAME OF AGENCY HERE navigate learning and to investigate how the characteristics of a learning organization apply to it. I invite you to participate in the survey where you will answer 45-50 questions and will require about 20 – 30 minutes of your time.

Participation is voluntary. If you choose to discontinue the survey at any time, your answers will not be saved or included in the study. The findings of this study may be helpful for you or your agency.

Please click the link below if you choose to participate

[Survey Link](#)

Thank you.

Appendix F

Quantitative Data Analysis Supplemental Information

Hypothesis Statements examined using non-parametric tests.

RQ1. Is there a significant difference in employee perceptions of continuous learning opportunities (Dimension 1) based on management level?

H1₀. No significant difference exists in employee perceptions of continuous learning opportunities (Dimension 1) based on management level.

H1_a. A significant difference exists in employee perceptions of continuous learning opportunities (Dimension 1) based on management level.

RQ2. Is there a significant difference in employee perceptions of continuous learning opportunities (Dimension 1) based on length of employment?

H2₀. No significant difference exists in employee perceptions of continuous learning opportunities (Dimension 1) based on length of employment.

H2_a. A significant difference exists in employee perceptions of continuous learning opportunities (Dimension 1) based on length of employment.

RQ3. Is there a significant difference in employee perceptions of dialogue and inquiry (Dimension 2) based on management level?

H3₀. No significant difference exists in employee perceptions of dialogue and inquiry (Dimension 2) based on management level.

H3_a. A significant difference exists in employee perceptions of dialogue and inquiry (Dimension 2) based on management level.

RQ4. Is there a significant difference in employee perceptions of dialogue and inquiry (Dimension 2) based on length of employment?

H4₀. No significant difference exists in employee perceptions of dialogue and inquiry (Dimension 2) based on length of employment.

H4_a. A significant difference exists in employee perceptions of dialogue and inquiry (Dimension 2) based on length of employment.

RQ5. Is there a significant difference in employee perceptions of collaboration and team learning (Dimension 3) based on management level?

H5₀. No significant difference exists in employee perceptions of collaboration and team learning (Dimension 3) based on management level.

H5_a. A significant difference exists in employee perceptions of collaboration and team learning (Dimension 3) based on management level.

RQ6. Is there a significant difference in employee perceptions of collaboration and team learning (Dimension 3) based on length of employment?

H6₀. No significant difference exists in employee perceptions of collaboration and team learning (Dimension 3) based on length of employment.

H6_a. A significant difference exists in employee perceptions of collaboration and team learning (Dimension 3) based on length of employment.

RQ7. Is there a significant difference in employee perceptions of created systems and shared learning (Dimension 4) based on management level?

H7₀. No significant difference exists in employee perceptions of created systems and shared learning (Dimension 4) based on management level.

- H7_a. A significant difference exists in employee perceptions of created systems and shared learning (Dimension 4) based on management level.
- RQ8. Is there a significant difference in employee perceptions of created systems and shared learning (Dimension 4) based on length of employment?
- H8₀. No significant difference exists in employee perceptions of created systems and shared learning (Dimension 4) based on length of employment.
- H8_a. A significant difference exists in employee perceptions of created systems and shared learning (Dimension 4) based on length of employment.
- RQ9. Is there a significant difference in employee perceptions of collective vision (Dimension 5) based on management level?
- H9₀. No significant difference exists in employee perceptions of collective vision (Dimension 5) based on management level.
- H9_a. A significant difference exists in employee perceptions of collective vision (Dimension 5) based on management level.
- RQ10. Is there a significant difference in employee perceptions of collective vision (Dimension 5) based on length of employment?
- H10₀. No significant difference exists in employee perceptions of collective vision (Dimension 5) based on length of employment.
- H10_a. A significant difference exists in employee perceptions of collective vision (Dimension 5) based on length of employment.
- RQ11. Is there a significant difference in employee perceptions of organization-environment connection (Dimension 6) based on management level?

- H11₀. No significant difference exists in employee perceptions of organization-environment connection (Dimension 6) based on management level.
- H11_a. A significant difference exists in employee perceptions of organization-environment connection (Dimension 6) based on management level.
- RQ12. Is there a significant difference in employee perceptions of organization-environment connection (Dimension 6) based on length of employment?
- H12₀. No significant difference exists in employee perceptions of organization-environment connection (Dimension 6) based on length of employment.
- H12_a. A significant difference exists in employee perceptions of organization-environment connection (Dimension 6) based on length of employment.
- RQ13. Is there a significant difference in employee perceptions of strategic leadership for learning (Dimension 7) based on management level?
- H13₀. No significant difference exists in employee perceptions of strategic leadership for learning (Dimension 7) based on management level.
- H13_a. A significant difference exists in employee perceptions of strategic leadership for learning (Dimension 7) based on management level.
- RQ14. Is there a significant difference in employee perceptions of strategic leadership for learning (Dimension 7) based on length of employment?
- H14₀. No significant difference exists in employee perceptions of strategic leadership for learning (Dimension 7) based on length of employment.
- H14_a. A significant difference exists in employee perceptions of strategic leadership for learning (Dimension 7) based on length of employment.

RQ15. Is there a significant difference in employee perceptions of individual level learning based on management level?

H15₀. No significant difference exists in employee perceptions of individual level learning based on management level.

H15_a. A significant difference exists in employee perceptions of individual level learning based on management level.

RQ16. Is there a significant difference in employee perceptions of individual level learning based on length of employment?

H16₀. No significant difference exists in employee perceptions of individual level learning based on length of employment.

H16_a. A significant difference exists in employee perceptions of individual level learning based on length of employment.

RQ17. Is there a significant difference in employee perceptions of team level learning based on management level?

H17₀. No significant difference exists in employee perceptions of team level learning based on management level.

H17_a. A significant difference exists in employee perceptions of team level learning based on management level.

RQ18. Is there a significant difference in employee perceptions of team level learning based on length of employment?

H18₀. No significant difference exists in employee perceptions of team level learning based on length of employment.

- H18_a. A significant difference exists in employee perceptions of team level learning based on length of employment.
- RQ19. Is there a significant difference in employee perceptions of organizational level learning based on management level?
- H19₀. No significant difference exists in employee perceptions of organizational level learning based on management level.
- H19_a. A significant difference exists in employee perceptions of organizational level learning based on management level.
- RQ20. Is there a significant difference in employee perceptions of organizational level learning based on length of employment?
- H20₀. No significant difference exists in employee perceptions of organizational level learning based on length of employment.
- H20_a. A significant difference exists in employee perceptions of organizational level learning based on length of employment.
- RQ21. Is there a significant difference in employee perceptions of the Dimensions of a Learning Organization based on gender, race, age group, or prior state agency experience?
- H21₀. No significant difference exists in employee perceptions of the Dimensions of a Learning Organization based on gender, race, age group, or prior state agency experience.
- H21_a. A significant difference exists in employee perceptions of the Dimensions of a Learning Organization based on gender, race, age group, or prior state agency experience.

RQ22. Is there a significant difference in employee perceptions of the Learning Levels based on gender, race, age group, or prior state agency experience?

H22₀. No significant difference exists in employee perceptions of the Learning Levels based on gender, race, age group, or prior state agency experience.

H22_a. A significant difference exists in employee perceptions of the Learning Levels based on gender, race, age group, or prior state agency experience.

SPSS Code & Supplemental Tables

How the Mean of the Levels and Dimensions were calculated in SPSS

```
COMPUTE Individual=Mean(Q1+Q2+Q3+Q4+Q5+Q6+Q7+Q8+Q9+Q10+Q11+Q12+Q13).  
EXECUTE.
```

```
COMPUTE Team=Mean(Q14+Q15+Q16+Q17+Q18+Q19).  
EXECUTE.
```

```
COMPUTE  
Organization=Mean(Q20+Q21+Q22+Q23+Q24+Q25+Q26+Q27+Q28+Q29+Q30+Q31+Q32+Q  
33+Q34+Q35+Q36+Q37+  
Q38+Q39+Q40+Q41+Q42+Q43).
```

```
COMPUTE D1ContinuousLearning=Mean(Q1+Q2+Q3+Q4+Q5+Q6+Q7).  
EXECUTE.
```

```
COMPUTE D2InquiryDialogue=Mean(Q8+Q9+Q10+Q11+Q12+Q13).  
EXECUTE.
```

```
COMPUTE D3CollaborationTeamLearning=Mean(Q14+Q15+Q16+Q17+Q18+Q19).  
EXECUTE.
```

```
COMPUTE D4CreatedSystemsSharedLearning=Mean(Q20+Q21+Q22+Q23+Q24+Q25).  
EXECUTE.
```

```
COMPUTE D5CollectiveVision=Mean(Q26+Q27+Q28+Q29+Q30+Q31).  
EXECUTE.
```

```
COMPUTE D6OrganizationEnvironmentConnection=Mean(Q32+Q33+Q34+Q35+Q36+Q37).  
EXECUTE.
```

```
COMPUTE D7StrategicLeadershipForLearning=Mean(Q38+Q39+Q40+Q41+Q42+Q43).  
EXECUTE.
```

```
COMPUTE  
IndividualLevel=Mean(Q1+Q2+Q3+Q4+Q5+Q6+Q7+Q8+Q9+Q10+Q11+Q12+Q13).  
EXECUTE.  
COMPUTE TeamLevel=Mean(Q14+Q15+Q16+Q17+Q18+Q19).  
EXECUTE.
```

COMPUTE

OrganizationLevel=Mean(Q20+Q21+Q22+Q23+Q24+Q25+Q26+Q27+Q28+Q29+Q30+Q31+
Q32+Q33+Q34+Q35+Q36+

Q37+Q38+Q39+Q40+Q41+Q42+Q43).

EXECUTE.

Appendix G

Qualitative Data Analysis Supplemental Information

Serial No.	Codes/Themes	Description	Reference Frequency
1, 65	Leadership Style for all learning	Exemplary leaders allow team members to contribute to their learning. Give them a platform to voice their input	31
2, 33, 69	Leader dependent Learning Structure	Learning on all levels and dimensions may depend on the type of leader (supervisor) an employee has. The leader's priorities, motivations, and style may influence the group or team	30
3, 26, 32, 76	Leadership Training for all learning	Equip leaders to lead by training them to lead their teams	25
4, <u>6</u> , 20	<u>Leader openness & support for all learning</u>	Transparency, accessibility, approachability, and openness may help group/team learning	20
5, 15, 22, 30, 31, <u>43</u> , <u>46</u> ,	<i>Communication & Information Sharing will improve all learning</i>	Resources are available but may be unknown to employees. Employees may be uninformed about resources	18
6, 23	<i>Leader Personal Interest in Team Members</i>	Leader demonstrates genuine interests in employees and their learning styles and motivations	18
7	Job Role dependency for learning	Individual learning strategy may depend on the job position	13
8	Organization Learning Gaps & Improvement Opportunity	Organization Learning Gaps & Improvement Opportunities: Transparency, inclusion in the strategic planning and implementation process, bilateral communication, strategic communication to improve awareness of and access to available resources, comprehensive leadership training to include focus on soft-skills and emotional intelligence, an expanded and flexible training curriculum	13
9	Team building activities to improve learning	Leader actively builds team members, pulls them along, encourages them to grow, and actively provides opportunities for their	13

Serial No.	Codes/Themes	Description	Reference Frequency
		professional and personal development in the workplace	
10	Team Learning Improvement Opportunity	Suggestions on how team/group learning could be improved: Leadership transparency	13
11, 51, 52,	<i>Demonstrate employee value & Invest in Employees</i>	Investing in employees by allowing them opportunities to access training makes them feel valued. Has implications for individual, team, and organization learning	12
12, 17, 42	Mentoring & Coaching for all Learning	Dimension 2 - Inquiry & Dialogue	12
13	Motivation to Learn	The employee must be motivated to learn and access information	12
14, 44, 77, 79	Existing Tools & Resources are available to employees	Resources provided by the organization to facilitate individual learning: Educational Websites, Conferences, trainings, good trainers, on-the-job training, management courses, education initiative, access to external consultants	12
15	<i>Clear, Accessible & Universal Communication for learning</i>	Accessible information will improve learning on all levels	11
16	Self-Study & Self-directed learning	Some things individual employees' do to improve themselves such as constant study	11
17	<i>Cross Training in Teams will enhance all learning</i>	Peer support	10
18	Expanded Training Structure for all learning	Employees should be offered training opportunities beyond the basics needed to perform their job duties. Consider soft skills, leadership skills	10
19	Research & Self-Development	Individual Level learning strategy	10
20, 25,	<i>Culture of Openness for all Learning</i>	A leadership culture of openness allows employees to seek learning opportunities	8
21	Individual Learning Improvement Opportunities	Some recommendations employees have that describe an environment conducive to learning: Improve widespread strategic communication, provide access to resources enterprise wide, hire right people as supervisors (leadership) that are knowledgeable and can motivate others,	8

Serial No.	Codes/Themes	Description	Reference Frequency
		include formal mentorships/mentoring, provide leadership training	
22	<i>Information Flow Challenges</i>	Horizontal and Vertical information flow improves learning and transparency	8
23	<i>Organizational systems to encourage team learning</i>	Teams feel empowered to learn if they perceive the leadership as genuinely supportive of their pursuits	8
24, 11, 27, 29, 55, 47, 70,	<u>Recommendations & Suggestions for all learning</u>	Recommendations & Suggestions for all learning	8
25	<i>Culture & Work environment must encourage all learning</i>	The work environment can be a driver or deterrent to learning	7
26	<i>Leading by Example encourages & reinforces learning</i>	The leader matters, he/she must also do, not only say	7
27, 80,	<i>Team cohesiveness for team learning</i>	If the team gels and is unified, more learning occurs	7
28	<i>High Stress Environment limits learning</i>	One factor that may compete with or hinder learning opportunities	6
29, 66,	<i>Action-Based, Hands-On, applied training formats will improve all learning</i>	Employees benefit from opportunities to apply what is taught on the job	5
30	<i>Bilateral Communication for all learning</i>	Not just top-down, but bottom-up information sharing is essential for inclusiveness, team building, and learning on all levels	5
31	<i>Communication Gaps</i>	Team, Individual, & Organizational communication challenges that result in lost learning opportunities and gains: unilateral communication pattern, inconsistent, sporadic, fragmented, none-widespread communication. Hit or miss communication	5
32	<i>Need for Oversight & Compliance for Individual Learning</i>	Need for Oversight & Compliance for Individual Learning. Even though the training is available, it must be enforced for individual learning to occur and continue	5
33	<i>Organization-Environment Connection dependent on leadership</i>	The leader in office drives the extent to which the agency is connected and relevant to the environment. A SME professional makes stronger connections	5

Serial No.	Codes/Themes	Description	Reference Frequency
34	Organization-Environment Connection gaps	Subject matter expertise and relevance of agency to mission and vision, and objectives limited. Insufficient applied learning and applicability of policy in everyday practice on the job	3
35	Utilize Multimodal learning formats (Flexibility) for all learning	Supervisor combines formal and informal learning to provide a wide range of team learning opportunities	5
36, 49, 60, 64, 67	Collaborations, Connections, Networking, Work Environment & Culture must support multi-level learning	Employees must interact with internal and external resources to encourage multilevel learning. The work environment and culture must support learning	4
37, 39, 50, 62, 63, 74, 81	Employees felt removed from strategic plan development	Employees did not feel included in the strategic planning process	4
38	Learning Impediments & Hindrances	Some things that hamstring learning: High Stress environment, short-staffed/heavy workload situations prevent training/knowledge application, limited organization-environment interfacing & networking opportunities (no push from leadership to attend conferences), leader (manager) lacking soft-skills to deal with staff	4
39	<i>Strategic vision gaps and challenges</i>	Limited employee inclusion in development process, fragmented communication strategy, lack luster accountability and compliance monitoring for strategic plan awareness and adoption. Wordy mission statement	5
40	<i>Individual Learning challenges</i>	Some experiences that hinder learning: Distrust stemming from past negative experiences in the agency. Limited information sharing and flow, not widespread and comprehensive	3
41	Individual Learning Styles	Individual differences may affect learning style	3
42	<i>Informal Peer to Peer on the job learning</i>	Mentoring and coaching opportunities encourages learning and information sharing	3

Serial No.	Codes/Themes	Description	Reference Frequency
43, 78	<i>Employees unaware of learning tools & opportunities that exist</i>	Employees may not be aware of the myriad learning resources available	3
44	<i>Mandated & Policy-driven training for learning</i>	Employees participate in some required formal learning events	3
45	<i>Situational & Reactive Learning events for Individuals</i>	When learning is not planned but reactive	3
46, 57	Tenure-Resource Awareness Relationship	It appears the longer you stay with the agency, the greater opportunity you have of being availed or aware of resources for individual learning	3
47, 71	Trust & Authenticity essential for all learning	Employees need to trust the leadership to be open and motivated to learn	3
48, 5, 28, 40, 45, 53, 58, 59, 68, 72, 73, 75	<u>Existing Challenges, Limitations, & Opportunities for Improvement</u>	Sustainability of evidence-based learning/training due to budget constraints; budget constraints for hiring highly qualified specialized staff, high turnover/some positions extremely difficult to fill (pay not competitive to private sector)	2
49	<i>Culture of Openness for all Learning. Accessibility to Resources will improve all learning</i>	Provide the tools, resources, and environment conducive for employees to learn on all levels	2
50	<i>Employee ownership of Strategic Plan</i>	Align the strategic plan to the entire agency rather than a specific division to improve universal adoption of objectives and enhance organization-environment connections	2
51	<i>Employees need to feel valued to learn on all levels</i>	When employees feel valued, they are inclined to learn	2
52	<i>Encourage self-directed learning by allowing employee time to invest in themselves</i>	Employees should be encouraged to seek out learning opportunities	2
53	<i>Limited training on using technology organizationally</i>	end users not sufficiently trained to use deployed or off-the-shelf application	2

Serial No.	Codes/Themes	Description	Reference Frequency
54, 61	My Summary	Researcher summary: People thrive in a learning environment. An organization should continually improve	2
55	<i>Organization-Environment Connections for all learning</i>	The organization should interface with its environment and learning community to grow and develop	2
56	Strengths	Existing strengths in the agency: Tools, resources, and information available. New leadership open to increased Organizational-Environment connections being forged	3
57	<i>Variable experience over extended tenure</i>	Up & Down experience with learning over extended agency tenure	2
58	<i>Weaknesses</i>	Organizational opportunities for Improvement: Haphazard, fragmented, inconsistent information sharing and exchange.	2
59	<i>Competing priorities limits learning opportunities</i>	If employees feel pulled in many different directions, it makes it challenging to seek learning opportunities	1
60	<i>Continuous learning environment for all learning</i>	Create an environment that encourages creativity and continuous learning	1
61	<i>Desirable Organizational Values</i>	What employees would like to see in their organization.	1
62	<i>Employees contribute to strategic plan implementation</i>	Employees are tasked with crafting plans to operationalize strategic objectives	1
63	<i>Encourage Strategic Buy-In by meeting staff</i>	Leadership should schedule face time with their employees to improve connections	1
64	<i>Environment & Culture must support individual motivation to learn</i>	The leadership should foster an environment and culture that encourages employee learning	1
65	<i>Esoteric team learning experiences</i>	The experiences of teams appear to vary based on unit, job function, and team leader	1
66	<i>Experiential Learning</i>	Learning from experience on the job	1
67	<i>Focus on Culture shift for all learning</i>	Make systemic changes that foster learning on all levels	1

Serial No.	Codes/Themes	Description	Reference Frequency
68	<i>High Turnover Rate impacts strategy implementation</i>	When employees don't stay in a position long enough, it is challenging to implement new strategy	1
69	<i>Hire Right person for leadership role and learning culture</i>	The person in the leadership position matters, it must be a right fit for learning to occur on all levels	1
70	<i>Holistic Employee Care & Investment for all learning</i>	Take care of the whole employee and they will take care of the organization	1
71	<i>Integrity, Fairness, & Consistency for all learning</i>	Fairness across the board regardless of employees' status encourages belonging and learning	1
72	<i>Multimedia tools for Individual learning</i>	Incorporate tools that facilitate learning	1
73	<i>Prioritize work over learning opportunities</i>	Employees may be overwhelmed with work, leaving no opportunity to access already available resources	1
74	<i>Risk of Multiple Interpretations of Vision & Communication strategy</i>	Top-Down Communication may not happen due to multiple or different interpretations of instruction at the higher leadership level	1
75	<i>Siloed learning structure</i>	Units and Offices working in siloes with little to no interactions with others	1
76	<i>Soft Skills in leaders for learning to occur</i>	People skills needed in leaders to facilitate learning for employees in their unit	1
77	<i>Some leadership training already exists</i>	There are some leadership training opportunities already	1
78	<i>Sporadic information sharing, training, and knowledge base exists</i>	It appears that informational and learning resources, tools, opportunities, and knowledge sharing happens sporadically and inconsistently across the organization. It appears to be dependent on the job role and office unit affiliation. This also appears to be dependent on the leadership - manager or supervisor	1
79	<i>Tailored learning events depending on job duties</i>	learning specific to job responsibilities	1
80	<i>Team cohesiveness matures with time</i>	The growth and development of the team evolves with time	1
81	<i>Universal Employee Engagement for Strategic Plan</i>	Carry everyone along in the strategic planning process	1

Table G1. Researcher attributed codes and themes from data corpus.

Legend	
Serial No.	The number assigned to the code/node/theme. The first number in this field is assigned to the adjacent node/code/theme. Any numbers underneath the first represent serial numbers of all linked nodes/codes/themes. An underlined serial number indicates the associated node/code/theme is itself linked to others
Nodes/Codes/Themes	A concept, thought, idea or impression that emerged in the transcribed data during transcription, review and/or analysis and is assigned by the researcher to the section of data
Description	A clear and concise explanation and description of the researcher's understanding of the nodes/codes/themes
Reference Frequency	The number of times a word, phrase, or section of text was assigned to the researcher's defined node/code/theme
<i>Italicized Codes</i>	A node/code/theme that is linked, associated with, or collapsed into another node/code/theme. They may also have other nodes/codes/themes collapsed into them
Non-Italicized codes	A node/code/theme that is not collapsed into another node/code/theme. They may also have other nodes/codes/themes collapsed into them
<u>Non-Italicized Underlined codes</u>	A node/code/theme that is not itself collapsed into another node/code/theme but has at least one node/code/theme with others collapsed into it.

Table G2. Legend for data corpus codes/nodes/themes.

Interview Data Analysis Narrative

The Nodes/Codes/Themes, Description & Reference Frequency in Table H2 represent the resonating ideas and concepts that emerged from the data corpus during the first phase of analysis. I summarized the thoughts presented by the interview participant in a section of text which could be anywhere from a single word or a paragraph of transcribed data in my own words to highlight the concept being communicated. The codes, nodes, and themes I assigned were phrases to which I added a short description for clarity and recollection. One reason for this approach in using researcher summaries as codes is to attempt to capture the underlying concept the participant is communicating after I had validated the information with them. I found that different participants may use varying words and phrases to describe similar situations or

scenarios, so it was critical that I summarized the ideas within context of the text. I had to revisit the section of text from which the code emerged to ensure my summaries were contextual and relevant. The Reference Frequency identifies how many times the code or theme was linked to a section of data in the data corpus during the first phase of data analysis. The Serial No. column identifies the sequential number assigned to the code during the first phase of data analysis. Particular attention to the Serial No. column outlines the second and third cycles/phases of data analysis. A list of numbers underneath the initial serial number represents the linking of codes when I observed close relationships in meanings than emerged from initial observations. This is where in the first round of coding, I separated the ideas but upon closer engagement with the data and first round codes, determined a unified underlying theme to warrant my considering them under one umbrella. Where this is done, I italicized the codes and themes to visually communicate the linking to other codes. Italicized codes represent those that have been linked to other codes but may themselves be umbrella (overarching) codes if other serial numbers are added to the associated fields. The codes that remain in original typeface are those that, although may be linked/associated with others as easily observed by the numbers listed in the serial no. column, are not collapsed into another overarching/umbrella code. The codes that are underlined and in original typeface represent umbrella (overarching) codes that have at least one other umbrella or overarching code linked. In the Serial No. column, underlined numbers represent those codes that themselves have other codes linked to them, first umbrella, while being associated with another second umbrella code. In summary, this process represents three cycles (phases, rounds) of data analysis from initial ideation to subsequent refinements. While the table only visually presents three cycles of the process, the actual analysis process constituted days of revisiting the textual data to reassess the appropriateness of the codes and the linking. It involved

iterative reviews and reconsiderations of emerging themes. It is important to emphasize that this was not a predetermined process with 1-2-3 finite steps. The data determined the processes that I utilized as insights emerged. There was continuity across each data analysis cycle described above such that it was not clear when one cycle ended and another started. As insights emerged, the data analysis process evolved until I was confident and comfortable that I had systematically, comprehensively, and authentically represented my participants ideas to the best of my understanding.