Workplace Learning: An Exploration of The Relationship Among Organizational Culture, Leader-Member Exchange, and individual Development Plans

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ABSTRACT

WORKPLACE LEARNING: AN EXPLORATION OF THE RELATIONSHIP AMONG ORGANIZATIONAL CULTURE, LEADER-MEMBER EXCHANGE, AND INDIVIDUAL DEVELOPMENT PLANS

Stacy M. Seaworth, Ed.D.
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Northern Illinois University, 2020
Elizabeth A. Wilkins and Betty H. La France, Co-Directors

As organizations work to adapt to rapidly changing technologies, consumer demands, and an evolving global market, learning in the workplace has become an essential component for successful businesses. Thus, leaders must find effective methods to promote employee learning. This study looked at organizational culture, leader-member exchange (LMX), and individual development plans (IDPs) in relation to employee participation in learning activities. A survey was sent to 50 employees working in an organization that utilized IDPs as a developmental tool. The results showed organizational culture, LMX, and IDPs were positively correlated with learning activities, indicating the more positively employees perceived the constructs, the more likely they were to participate in learning activities. Of the three supporting constructs, IDPs were the most influential factor in predicting employee participation in learning activities.

Additional results showed the longer an employee worked at the organization, the less likely they were to participate in learning activities. This finding suggests organizations may need to focus more of their developmental resources on tenured employees. In contrast, findings indicate the longer an employee worked for a supervisor, the more likely they were to engage in learning, supporting the idea LMX relationships can deepen over time and lead to more positive
workplace outcomes. Although IDP use was the most important factor for predicting employee participation in learning activities, IDP use alone may not be enough to motivate employees to participate in learning activities. Therefore, the most effective way to support employee learning in the workplace is to create a learning culture, promote higher quality LMX, and use an IDP.
NORTHERN ILLINOIS UNIVERSITY
DE KALB, ILLINOIS

DECEMBER 2020

WORKPLACE LEARNING: AN EXPLORATION OF THE RELATIONSHIP AMONG
ORGANIZATIONAL CULTURE, LEADER-MEMBER EXCHANGE, AND
INDIVIDUAL DEVELOPMENT PLANS

BY

STACY M. SEAWORTH
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A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE
DOCTOR OF EDUCATION

DEPARTMENT OF CURRICULUM AND INSTRUCTION

Doctoral Co-Directors:
Elizabeth A. Wilkins
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It takes a village to raise a child, and the same is true of doctoral students. I completed this milestone because I had the help of an exceptional support team.

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God is Good!
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CHAPTER 1
INTRODUCTION

Gone are the days when employees learned a skill in school, worked in that trade for the next 40 years, and then retired with a comfortable pension. Instead, global markets and the advancement of technology require organizations to continually adapt and innovate to be successful (Beausaert, Segers, & Gijselaers, 2011a; Froehlich, Segers, & Van den Bossche, 2014). To remain competitive in an ever-changing environment, employee learning and development are increasingly important due to their association with higher organizational commitment, employee satisfaction, and workplace performance (Maurer, Weiss, & Barbeite, 2003). Therefore, creating a learning environment in the workplace is more imperative for businesses than ever before (Beausaert, Segers, & Gijselaers, 2011b; Lejeune, Mercuri, Beausaert, & Raemdonck, 2016).

Learning environments are a product of the workplace culture that affects every aspect of an organization, including the norms, standards, and operations (Sherman et al., 2014). The culture can be either a catalyst or a barrier to an organization’s ability to adapt, innovate, and build new knowledge (Schraeder, Tears, & Jordan, 2005). Because behaviors associated with the creation, sharing, and management of knowledge are inextricably linked to an organization’s culture (De Long & Fahey, 2000), it is impossible to study learning in the workplace without also considering the influence of organizational culture.
A second aspect of the workplace environment significantly related to culture is leadership (Marsick & Watkins, 2003; Sherman et al., 2014). Leadership and organizational culture are said to “have reciprocal influences on one another” (Giberson et al., 2009, p. 125). Leaders are shaped by the culture in which they work, but they also form the culture by making decisions at strategic and individual levels that impact how knowledge is gained and shared. However, little is understood about how leaders stimulate employees to participate in learning activities (Bezuijen, van Dam, van den Berg, & Thierry, 2010). To explore the connection between employee learning and leadership, this study tested the relationship through application of the leader-member exchange (LMX) theory. According to LMX theory, leaders do not have the same quality of relationship with each employee (Graen & Uhl-Bien, 1995). Instead, LMX theory states that leaders vary their personal and professional interactions with their subordinates, thereby determining the quality of the relationship. The quality of the relationship between supervisors and subordinates is important due to its potential to influence employee engagement in learning activities.

Organizations invested in employee learning also adopt developmental tools to promote learning in the workplace. One tool for encouraging participation in learning activities is the individual development plan (IDP). IDPs were developed to help employees benefit from a conscious effort to promote their professional growth (Kaye & Giuloni, 2012) through recording past learning and future learning goals. IDPs are intended to be authored by employees with feedback from their supervisors (Beausaert et al., 2011a). Although empirical studies on IDP use are limited, research suggests the effectiveness of the tool is impacted by organizational culture and leader involvement (Beausaert et al., 2011b; Lejeune et al., 2016).
Based on the increasing need to promote learning in the workplace, the current study was designed to look at the conditions that support and stimulate employee learning. Through a one-time electronic survey, data were collected to explore the relationship among organizational culture, LMX, and IDPs to determine their influence on employee participation in learning activities. This introductory chapter presents an overview of the study, including the framework, problem and purpose statement, research questions, definitions of key terms, significance of the study, and data collection methods.

Framework

This study utilized a three-part framework: 1) organizational culture, 2) leader-member exchange theory, and 3) individual development plans as they relate to employee participation in learning activities. A brief description of each construct follows with more elaboration in Chapter 2. Literature also indicates a connection among organizational culture and leaders (Giberson et al., 2009; Schein, 2010) as well as leaders and IDPs (Beausaert, Segers, Fouarge, & Gijselaers, 2013), suggesting a relationship among the three supporting variables included in the study. Figure 1 illustrates the expected relationship among the constructs in the framework.

Figure 1 is a theoretical model not a structural equation model. As the figure indicates, organizational culture, LMX, and IDPs are all expected to have positive significant relationships with participation in learning activities. When all three constructs are in place, participation in learning activities is expected to be highest.
Organizational Culture

As organizations began to recognize the need to adapt to societal, marketplace, and technological trends to remain relevant (Burke, 2008; Katz & Kahn, 1978), researchers worked to define the characteristics of successful organizations. One defining feature of effective companies is organizational culture, described as “the taken-for-granted values, underlying assumptions, expectations, collective memories, and definitions present in an organization” (Cameron & Quinn, 2011, p. 19). Schein (2010) further defines organizational culture as a “pattern of shared basic assumptions learned by a group as it solved its problems of external and internal integration” (p. 18). Cameron and Quinn (2011) add that culture also reflects how employees identify with an organization and learn to operate within the norms and standards of a given environment.

One example of an organizational culture that has gained interest due to its ability to improve organizational performance is the learning culture (Crouse, Doyle, & Young, 2011; Froehlich et al., 2014; Schraeder et al., 2005). Positive learning cultures are defined by their...
ability to promote opportunities for development at the individual and collective levels (Marsick & Watkins, 2003; Schein, 2010) as well as improve agility and boost responsiveness (Davis & Daley, 2008; De Long & Fahey, 2000). Schein (2010) argues that learning cultures must have development in their DNA, and employees must possess the “basic underlying assumption” that learning is valuable and worth the investment of time and resources (p. 19). Marsick and Watkins (2003) contend that positive learning cultures are defined by their ability to promote opportunities for development, encourage open dialogue, empower employees, foster collaborative learning, and have supportive leaders. What was important for this study is the idea that positive learning cultures stimulate employee participation in learning activities (Bezuijen, van den Berg, van Dam, & Thierry, 2009; Froehlich et al., 2014).

De Long and Fahey (2000) found that culture is revealed through the interrelated values, norms, and practices of an organization that influence the learning behaviors of employees. Specifically, De Long and Fahey identified four ways culture influences how employees’ knowledge is formed and shared within an organization:

First, culture...shape[s] assumptions about...which knowledge is worth managing. Second, culture defines the relationships between individual and organizational knowledge...Third, culture creates the context for social interaction that determines how knowledge will be used...Fourth, culture shapes the process by which new knowledge...is created, legitimized, and distributed in organizations. (p. 113)

The interrelatedness of culture and learning suggests it is impossible to study one without also considering the influence of the other. A second supporting condition that also has the potential to influence employee learning is the relationship between leaders and their subordinates. This relationship is expanded in the following section on LMX.
Leader-Member Exchange Theory

Leaders play a pivotal role in the creation of culture in an organization (Cameron & Quinn, 2011; Giberson et al., 2009; Schein, 2010). From the CEO developing the strategic organizational vision to junior-level managers overseeing day-to-day operations, leaders make decisions about the allocation of resources, company-wide procedures, structure of projects, work assignments, and selection of the next generation of leaders (Giberson et al., 2009).

Research (e.g., Bezuijen et al., 2010; Graen & Uhl-Bien, 1995) shows that as leaders select employees for work projects and advancement, the relational quality between the supervisor and subordinate plays an influencing role in the decision process. A theory that looks specifically at supervisor employee relationships is leader-member exchange (LMX). LMX theory, first identified more than 45 years ago (Dansereau, Graen, & Haga, 1975), specifically focuses on the dyadic relationship between leaders and their subordinates rather than a leader’s overall impact on an organization. The basic premise of LMX theory is that leaders do not have the same quality of relationship with each subordinate (Dulebohn, Bommer, Linden, Brouer, & Ferris, 2012; Graen & Uhl-Bien, 1995). High-quality LMX relationships are defined by mutual trust, respect, and loyalty and tend to generate both professional and social exchanges between the supervisor and the subordinate (Graen & Uhl-Bien, 1995; Janssen & Van Yperen, 2004). In contrast, low-quality LMX relationships are more formalized and limited to the exchanges needed to complete work-related tasks (Graen & Uhl-Bien; Janssen & Van Yperen, 2004).

High-quality LMX has been associated with a number of positive workplace outcomes such as employee commitment (Basu & Green, 1997; Joo, 2010), innovation (Basu & Green, 1997; Walumbwa, Crotanano, & Hartnell, 2009), and job performance (Dulebohn et al., 2012;
Reb, Chaturvedi, Narayanan, & Kudesia, 2018; Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016; Wayne, Liden, Kraimer, & Graf, 1999). Adding to the plethora of LMX research, the focus of the current study is on the positive influence LMX exerts on employees’ learning behaviors (Bezuijen et al., 2010; Bezuijen et al., 2009; Maurer, Pierce, & Shore, 2002; Walumbwa et al., 2009). However, studies connecting LMX and employee engagement in learning activities are limited (Bezuijen et al., 2010).

LMX was included in the current research based on the premise that the LMX relational quality may also impact successful implementation of an individual development plan (IDP), the final supporting condition in the current study. Leaders serve an integral role in the IDP process. They assist employees by providing feedback, encouraging reflection, supporting developmental endeavors, and establishing learning goals (Beausaert et al., 2011a). However, no known empirical studies have been published that included both LMX and IDPs. More discussion about IDPs is found in the following section.

**Individual Development Plans (IDPs)**

IDPs are tools organizations use to develop their workforce. Initially, IDPs started in the form of portfolios used exclusively by professionals such as photographers, artists, and architects to showcase their work (Austin, Marini, & Desroches, 2005; Lyons & Evans, 1997). Today IDPs, also called personal/professional development/growth plans, are growing in popularity in educational, medical, and workplace settings (Beausaert et al., 2011a; Clegg & Bradley, 2006; Hobin, Clifford, Dunn, Rich, & Justement, 2014), yet there is a scarcity of empirical research on the topic (Beausaert et al., 2011a). Although the tool has been used for both development and
evaluation (Smith & Tillema, 2001), the current study focused on the use of IDPs for employee development.

As a development tool, IDPs are designed to motivate workers to participate in learning activities (Beausaert et al., 2013; Beausaert et al., 2011b). According to Beausaert et al. (2011a), the document records the competencies employees previously worked on, the knowledge or skill gaps they are planning to work on in the future, and strategies to accomplish their goals. Simply put, the IDP asks employees to reflect on where they are, where they want to go, and how they will get there. The document is written by the employee with input from their supervisor. The supervisor serves as a source of information for the employee by providing performance feedback and encouraging reflection. The desired outcome of the IDP is closure of employee competency gaps through participation in learning activities (Beausaert et al., 2011a, 2011b, 2011c; Kaye & Giuloni, 2012). A more detailed explanation of workplace learning and activities follows.

**Workplace Learning and Activities**

As organizations adapt to remain competitive, so must their workers. Gaining new knowledge and skills is key to helping workers adjust to change, increase their performance, and remain competitive for employment (Le Clus, 2011; Manuti, Pastore, Scardigno, Giancaspro, & Morciano, 2015). Emphasizing the need for learning in the workplace, Cameron and Quinn (2011) pointed out the most sought-after jobs in 2010 were not in existence in 2004. They contend, “We are currently preparing students for jobs that don’t yet exist, to use technologies that have not been invented, in order to solve problems we don’t even know are problems yet”
Thus, workplaces must value, support, and create opportunities for employee learning (Caruso, 2016; Le Clus, 2011; Marsick & Watkins, 2003).

Two types of workplace learning identified in the literature are formal and informal learning (Caruso, 2016; Le Clus, 2011; Manuti et al., 2015). Formal learning is typically associated with planned training events with assigned facilitators and established objectives (Caruso, 2016; Manuti et al., 2015). Informal learning, in contrast, is less structured and takes place in the daily work tasks of employees (Caruso, 2016; Manuti et al., 2015). Manuti et al. stated that when learning is taking place, facets of both types are typically present and working in parallel.

Tying the Framework Together

The previous sections highlighted research on organizational culture, LMX theory, and IDPs as they relate to employee participation in learning activities. Although the constructs may be interrelated, the outcome of learning activities is the focus of the current work. Based on past research, it was expected that learning cultures, known to promote opportunities for employee development, would be positively related with employee engagement in learning activities (Schein, 2010). Additionally, leaders, as interconnected members of an organizational culture, play a key role in promoting learning in and out of the workplace (Cameron & Quinn, 2011; Giberson et al., 2009; Schein, 2010). Measured through the lens of the LMX relational quality, it was expected that high-quality leader-employee relationships would have a positive relationship with employee learning (Bezuijen et al., 2010). Finally, the study included IDPs, a developmental tool shown to promote employee learning (Beausaert et al., 2011b). This tool may be found in positive learning cultures and is also influenced by leader involvement. Thus, it was
anticipated that IDPs would also have a positive relationship with employee participation in learning activities.

Problem and Purpose Statements

Despite their increased use in organizations, few empirical studies show the effectiveness of IDPs (Beausaert et al., 2013; Beausaert et al., 2011b; 2011c; Lejeune et al., 2016). The Personal Development Plan Practice Questionnaire (PPQ), the only known IDP survey tool, was created to measure three IDP supporting conditions: learning and reflection, instruction and feedback, and a motivating supervisor (Beausaert et al., 2011a). Two studies, conducted in Europe, found that learning and reflection and the supporting supervisor showed a weak to a moderate relationship with participation in learning activities and perceived job performance (Beausaert et al., 2011b; Lejeune et al., 2016). In contrast, instruction and feedback did not show a significant relationship with the outcomes of learning and performance. An additional study surveyed Dutch pharmacists who either used, or did not use, IDPs (Beausaert et al., 2013). The findings showed that IDP users did not plan more future learning activities than non-users. The researchers suggested the lack of correlation between IDPs and plans to participate in future learning activities may have been a result of the organizational culture, influence of the supervisor, or employee reflection skills. Thus, more empirical studies are needed to understand the outcome(s) of developmental IDPs and the supporting processes that influence its success. Additionally, the bulk of empirical research on IDPs in the workplace was conducted in Europe, so more research with the U.S. workforce is needed to understand the impact of IDPs with U.S. employees. Therefore, the purpose of this study was to investigate the use of IDPs in a midwestern U.S. organization and the relationship among organizational culture, LMX, IDPs,
and employee participation in learning activities. The data collected from the study were analyzed to explore the following hypotheses:

H1: Learning cultures are positively related to employee participation in learning activities.

H2: Higher-quality leader-member exchange relationships are positively related to employee participation in learning activities.

H3: Individual development plan use is positively related to employee participation in learning activities.

The research question assessed demographic variables also related to the culture of an organization and serves as an extended exploration of the company’s culture.

Does education level, time at organization, time with supervisor, age, and/or gender influence the relationship among organizational culture, LMX, IDPs, and employee participation in learning activities?

Significance of Study

Learning in the workplace is increasingly important for enhancing employee and organizational effectiveness (Bezuijen et al., 2009; Froehlich et al., 2014; Maurer et al., 2003). Employee development is also essential when considering the inevitable need to backfill employees as they move into positions of increased responsibility, leave the organization, or retire. For many employees, educational opportunities (both formal and informal) within the organization may also be an important incentive to hire on and continue with the company. To remain competitive, organizations need to create learning cultures in which employees are motivated to develop through participation in learning activities (Bezuijen et al., 2009).

One strategy employers are embracing to motivate employee engagement in learning activities is use of the IDP. Currently, few empirical studies exist on the use of IDPs (Beausaert
et al., 2011a); thus, this study can add to that limited body of work. Additionally, most of the recent empirical work looked at organizations in Europe. The current study focused on IDPs in a U.S.-based company, offering important insights into an American organization. Moreover, this study looked at multiple variables not previously studied in conjunction with IDPs (i.e., organizational culture and LMX) that may support the IDP process and stimulate employee participation in learning activities.

The current study considered how a learning culture, leader-member relationship quality, and individual development plans relate to employee participation in learning activities. The study was designed to inform the participating company about employees’ perceptions of its organizational culture, the relational quality of the supervisors and employees, and the impact of individual development plans on the employees’ professional development. Results of the study may provide stakeholders with the data to make informed decisions about best practices to promote learning in the workplace. Additionally, employees may be encouraged to think more broadly about their overall operational experience as an environment in which learning occurs.

Methodology

This study used a survey methodology with a quantitative design to explore the relationship among organizational culture, leader-member exchange, individual development plans, and employee participation in learning activities. Convenience and purposeful sampling were used to deliver a one-time web-based survey to employees utilizing IDPs in the workplace. Data were analyzed using descriptive and relational statistics.
Organization of the Study

This study is divided into five chapters. Chapter 1 introduced the research topic, framework, significance, and methodology. Chapter 2 expands on the study’s framework and reviews relevant literature on organizational culture, leader-member exchange theory, individual development plans, and workplace learning. Chapter 3 details the research methods relative to site selection, participants, data collection, and analysis. The results are detailed in Chapter 4. Finally, Chapter 5 includes a discussion of the findings as well as the implications, limitations, and areas for future research.
CHAPTER 2
LITERATURE REVIEW

This chapter explores scholarly research and information related to employee development in the workplace. Through a synthesis of relevant literature, the constructs of organizational culture, LMX, and IDPs are discussed as they relate to employee participation in learning activities. The final section of the chapter focuses on formal and informal learning and the strategies employees use to enhance their knowledge and skills.

The need for businesses to change and innovate to remain relevant is best understood through the lens of organizational change theory first articulated by Katz and Kahn (1978). The researchers held that businesses, like living organisms, are part of an open system. As the name suggests, open systems are affected by the environments in which they operate. As the environment changes, the system (organism/business) must also adapt and evolve to survive (Burke, 2008; Katz & Kahn, 1978). One way that businesses are adapting to meet the demands of changing societal and marketplace demands is by investing in employee development (Maurer et al., 2003). However, employee development can be costly and time consuming; therefore, organizations must find the most effective ways to promote learning in the workplace. Thus, the focus of this study was to explore the conditions that promote employee participation in learning activities. Each construct (organizational culture, LMX, IDPs, and learning activities) is explained in the following literature review.
Organizational Culture

The culture of an organization includes the values, norms, and standards that influence daily operations (Schein, 2010). Culture has the power to influence how employees think, feel, and behave in a given environment (Cameron & Quinn, 2011; Schein, 2010). While influential, however, organizational culture remains a difficult concept to define and measure because much of what makes up culture exists below the surface; it explains why employees interact, adapt, and perform in certain ways (Schein, 2010; Schraeder et al., 2005; Sherman et al., 2014). Although an elusive construct, the potential impact of organizational culture makes it a worthwhile concept to study.

Schein (2010) suggested organizational culture should be analyzed on three levels: artifacts, espoused beliefs and values, and basic underlying assumptions. Each level refers to the degree a phenomenon is visible to an outside observer. The artifact, or surface level, includes phenomena that are easy to observe, such as employee dress, the physical environment, formality of interactions, published values, and stories of the organization. The second level, espoused beliefs and values, is the reflection of a shared organizational ideology and helps to bring meaning and comfort to members of the organization. Examples of beliefs and values may include innovation, teamwork, and work ethic. The third and final level, basic underlying assumptions, describes thinking and behavior so ingrained in a unit that little variation is found among its members. Reaching the third level requires repeated success implementing the beliefs and values asserted in level two. For example, if teamwork is valued in an organization, it would be unlikely for members to tout their individual successes. Exposure of the underlying assumptions (the third level), or what lies beneath the surface, allows an observer to understand
the essence of a culture and better interpret the more observable phenomenon (Schein, 2010). Thus, this study sought to gain insight into the deeper layers of the organization’s workplace culture and its relationship with employee participation in learning activities.

One type of organizational culture integral to the current research is a learning culture. Positive learning cultures are defined by their ability to create opportunities for learning at the individual, group, and strategic levels (Marsick & Watkins, 2003). They are recognized by workplace environments that encourage open dialogue, empower employees, have supportive leaders, and foster collaborative learning (Marsick & Watkins, 2003).

Marsick and Watkins (2003) suggest that “learning organizations proactively use learning in an integrated way to support and catalyze growth for individuals, teams, and… organizations” (pp. 142-143). The researchers identified seven distinguishing attributes of a learning culture: 1) creates continuous learning opportunities, 2) promotes inquiry and dialogue, 3) encourages collaboration and team learning, 4) empowers people toward a collective vision, 5) connects the organization to its environment, 6) establishes systems to capture and share learning, and 7) provides strategic leadership for learning.

While an organization may not possess all the attributes described above, what is important for this study is the belief that organizational culture collectively and positively influences the process by which knowledge is gained and shared (De Long & Fahey, 2000; Sherman et al., 2014) and promotes employee participation in learning activities (Bezuiken et al., 2009; Froehlich et al., 2014). In addition, De Long and Fahey (2000) argue that organizational culture and learning behaviors are interconnected; culture shapes employee beliefs about the value of development and the process by which knowledge is obtained and distributed.
Therefore, it was expected that a positive correlation exists between organizations that have a learning culture and employee participation in learning activities.

Organizational leaders who manipulate, create, and help cultures to evolve are integral to learning cultures (Marsick & Watkins, 2003; Schein, 2010). Leaders influence culture through allocation of resources, management of issues, and modeling (Schein, 2010). Additionally, leaders impact culture through decisions about employee hiring, promotions, and learning opportunities (Schein, 2010). The quality of relationships between supervisors and subordinates is also thought to influence the decisions leaders make concerning employee development and selection for positions of increased responsibility. The role of leaders and their relational influence on subordinates’ participation in learning activities follows with a review of literature on LMX theory.

**Leader-Member Exchange (LMX)**

A useful way to look at the subordinate-supervisor relationship is through application of LMX theory, as it looks specifically at the one-on-one relationship between leaders and their subordinates. The essential principle of LMX is that the relational quality of subordinates and their supervisors is not the same for each employee (Dulebohn et al., 2012; Graen & Uhl-Bien, 1995). High-quality LMX relationships, with shared feelings of trust and respect, promote both personal and professional exchanges (Graen & Uhl-Bien, 1995; Janssen & Van Yperen, 2004). In contrast, low-quality LMX relationships are marked by limited job-related exchanges between subordinates and supervisors and lack the mutual feelings of loyalty and respect of high-quality LMX connections (Graen & Uhl-Bien, 1995; Janssen & Van Yperen, 2004).
LMX is based on social exchange theory, which has been described as one of the most influential theories in explaining workplace behaviors (Cropanzano & Mitchell, 2005). It operates on the premise that a series of social interactions will result in a “mutually contingent exchange of benefits” (Gouldner, 1960, p. 164). The premise of the exchanged benefits or reciprocity is that individuals are more likely to contribute time, talent, effort, and personal capital to someone who will provide in-kind rewards and opportunities (Gouldner, 1960). For example, employees who have high-quality LMX relationships would be more inclined to put in longer hours and extra effort with the expectation their efforts will be rewarded by the supervisor (e.g., recognition and promotion). Supervisors in turn would assign the most critical projects to employees with whom they enjoy high-quality LMX with the expectation that employees will produce superior results and bolster the image/reputation of the supervisor.

Additionally, LMX theory states that leader-subordinate relationships can change. This evolution is accomplished by moving through the stages of stranger, acquaintance, and maturity in which lower quality exchange relationships have the potential to graduate to higher quality relationships over the lifetime of the dyad (Graen & Uhl-Bien, 1995). Graen and Uhl-Bien describe this as a social exchange process in which the leader and employee begin as strangers, with formal exchanges focused on only the communication necessary to complete work-related tasks. In the acquaintance stage, supervisors and employees increase social exchanges on professional and personal levels but still on a limited basis. The final exchange level, maturity, is the level in which the pair develops a mutual exchange of influence and the relationship is characterized by loyalty, trust, and respect. At the maturity level, leaders and employees have the potential for the greatest benefits and levels of reciprocity (Graen & Uhl-Bien, 1995). For example, at the maturity level the leader may count on the employee to take on additional
responsibilities without additional pay, and the employee may expect extra support and career mentorship from the supervisor. Reaching the maturity stage, however, may not be possible. Graen and Uhl-Bien (1995) point out that not all dyads will progress beyond the stranger and acquaintance stages.

Research shows that higher quality LMX relationships are associated with positive workplace outcomes such as employee commitment (Basu & Green, 1997; Joo, 2010), innovation (Basu & Green, 1997; Walumbwa et al., 2009), and job performance (Dulebohn et al., 2012; Martin et al., 2016; Reb et al., 2018; Wayne et al., 1999). However, the focus of this study was the potential influence that LMX quality has on employee learning behaviors. However, studies connecting LMX and employee engagement in learning activities are limited (Bezuijen et al., 2010; Bezuijen et al., 2009; Maurer et al., 2002; Walumbwa et al., 2009). Thus, the current study adds to the small body of research by looking at the correlation.

The most recent meta-analysis of LMX by Dulebohn et al. (2012) looked at 247 studies that included LMX as the main focus. The purpose of the study was to look at the process through which LMX mediates relationships between multiple antecedents and consequences. Within the 247 studies analyzed, they identified LMX as a mediator of 16 antecedents and 21 consequences. The meta-analysis did not include the variables of organizational culture, IDPs, and learning activities of interest in the current study. Yet, the meta-analysis did look at improved job performance as a consequence, which proved to have a significant positive association with higher quality LMX (Dulebohn et al., 2012). Job performance is not specifically measured in the current study, but it is associated with employee learning and development (Le Clus, 2011; Manuti et al., 2015). Therefore, LMX is a meaningful facet to consider when researching workplace learning.
What is important for the present work are the LMX principles based on social exchange and reciprocity. The two facets of LMX theory directly affect the quality of relationships between subordinates and supervisors. Workers, for example, in high-quality LMX relationships are often provided more challenging and difficult assignments, leading to an expectation they will engage in more learning activities (Bezuijen et al., 2010; Maurer et al., 2002) and in turn have a higher job performance (Dulebohn et al., 2012; Graen & Uhl-Bien, 1995; Martin et al., 2016; Scandura & Schriesheim, 1994). In contrast, employees in low-quality LMX relationships are less likely to be assigned more complex tasks and less motivated to seek out developmental opportunities (Bezuijen et al., 2010; Maurer et al., 2002).

Leaders integral to organizational culture and LMX also play a pivotal role in the final supporting construct in the study: IDPs. The IDP process depends on leaders to assist employees by providing performance feedback, encouraging reflection, identifying learning goals, and providing developmental opportunities. More discussion about IDPs and their role in promoting employee learning is expanded in the following section.

**Individual Development Plans (IDPs)**

As businesses recognize the benefits of employee development, tools such as the IDP have grown in popularity (Beausaert et al., 2011a). IDPs were adopted to help workers reach individual, team, and organizational goals. Although IDP use in businesses has increased, studies on the use of IDPs have focused mostly on students and medical practitioners (Beausaert et al., 2011a). However, even within these fields, there is a dearth of empirical research focused on IDPs (Hobin et al., 2014).
The varying names and purposes for IDPs make researching the tool more complex, as was the case for Beausaert, Segers, van der Rijt, and Gijselaers (2011d), who conducted the only known literature review of IDP studies. Searching through popular data bases using the various titles used to describe IDPs, the team found 54 studies conducted between 1995 and 2008 in which IDPs in the workplace were the focus. In addition to an array of terms used to label the tool, the studies also showed varying characteristics and desired outcomes for the IDP (Beausaert et al., 2011d). However, the scholars found several features the instruments shared and, based on the commonalities, developed the following definition. They stated the IDP:

- Gives an overview of the competencies the employee worked on in the past and which competencies the employee is planning to work on in the future and how
- Should be composed by the employee himself, mostly in consultation with the supervisor
- Can be used as a basis/structure for conversations with the supervisor or coach, who provides the employee with feedback and stimulates the employee’s reflection
- Serves as a decision-making tool from planning an individual training program to assessing the suitability of a promotion. (p. 236)

Beausaert et al.’s (2011d) work most heavily influenced the definition of IDPs used for the current study: a document used to record competencies on which an employee previously worked, plans to work on in the future, and strategies to accomplish the learning goals. It is designed to be authored by employees after feedback from their immediate supervisors and reflection.

The 54 studies also revealed a broad range of goals, results, and supporting conditions associated with IDP use. In the literature review, Beausaert et al. (2011d) found nine clusters of desired outcomes for IDPs: 1) professional development, 2) reflective learning, 3) providing evidence, 4) documenting, 5) certification, selection, promotion, 6) external mobility, 7) coaching, 8) stimulating confidence, and 9) organizing. Regardless of the desired goal, the
researchers concluded that most (all but five) of the studies showed IDP use in the workplace had a positive influence. However, the team stated that many of the studies had a low number of participants (i.e., 37 of the studies had fewer than 50 participants). Nearly two-thirds of the studies used qualitative methods (e.g., interviews, focus groups, and portfolio analysis), suggesting that additional quantitative studies may add to the understanding of IDP effectiveness in the workplace. The studies also described numerous supporting conditions thought to enhance the use of IDPs. Examples of the conditions included coaching from peers and leaders, feedback, a supportive environment, perceived importance, reflection, and training sessions. However, Beusaert et al. (2011d) pointed out that most of the studies did not test these supporting conditions; thus, the effectiveness remains an empirical question.

A study conducted by Smith and Tillema (2001) looked at the overall role of IDPs and found the tool had two main purposes: development and evaluation. The former focused on stimulating employee learning, whereas the latter had the primary function of serving as an assessment of employees for salary increase, promotion, and accountability. Smith and Tillema stated that when the IDP was viewed as an instrument for assisting in development, employees were more likely to engage in learning activities and have improved performance than when the IDP was believed to be a tool for selection and promotion. The researchers suggested the developmental role of the tool allowed a freer exchange of ideas and a more honest assessment of competency gaps versus conversations in which promotions or salary increases are in consideration. A practical implication for supervisors is to make the purpose of IDPs clear to employees. When the IDP is used for both development and evaluation purposes, the discussions should be separate and focused (Ellis, 2004; Fenwick, 2003; Smith & Tillema, 2001). Although
IDPs are used for employee development as well as assessment, the focus of this study is the use of IDPs as a developmental tool.

In addition to the literature review of IDP studies, Beausaert et al. (2011b) conducted their own research and concluded that to be effective the IDP should be accompanied by three supporting conditions. The first supporting condition, employee learning and reflection refers to an employee’s openness and motivation to learn and ability to successfully self-reflect. Second is information and feedback, which includes the employee’s understanding of how to use the IDP and receipt of meaningful feedback on performance. The final supporting condition is a motivating supervisor, who provides the employee with both support and autonomy to pursue the learning plan. If the supporting constructs are in place, the researchers found the IDP positively influenced employee participation in development activities (Beausaert et al., 2011b).

Lejeune et al. (2016) added to the body of research by quantitatively studying the three supporting conditions researched by Beausaert et al. (2011b) and the individual supporting factor of self-directedness. They concluded that learning and reflection and self-directedness had significant, positive relationships with employee participation in developmental activities and perception of performance. However, in contrast to Beausaert et al.’s (2011b) findings, instruction and feedback and a motivating supervisor did not have a significant correlation with participation in developmental activities.

An additional quantitative study by Beausaert et al. (2013) of more than 2,700 female Dutch pharmacists sought to compare learning activities and self-perception of job performance between pharmacists who use an IDP and those who do not, the only known study that used a control group method to research IDPs. The results indicated that users of IDPs had participated in more learning in the past than non-users. However, users of the IDP did not plan more
learning activities in the future than non-users, nor did the two groups differ significantly in their perceptions of individual job performance. For this group of participants, the IDP proved to be more for tracking and feedback than a forward-planning tool. Supervisors of the pharmacists in this study, it appeared, did not use IDP conversations to support pharmacists in the planning of future developmental activities. While IDP users did self-report the completion of more learning activities than non-users, it is unclear what role the IDP played in motivating employee development.

Identifying IDP Supporting Constructs

Three occupational areas that have adopted use of the IDP for development are the educational (Clegg & Bradley, 2006; Peine, 2008), medical (Bullock, Firmstone, Frame, & Bedward, 2007; Burman, Boscardin, & Van Schaik, 2014), and business fields (Beausaert et al., 2011a). Reviewing the definitions used by each field, three supporting constructs were shared: communication/performance feedback, reflection, and goal setting. Each of the constructs is expanded in the following sections and forms the basis for the researcher-developed IDP scale implemented in this study (see Chapter 3 for details on the IDP survey instrument).

Communication and Performance Feedback

One of the foundational elements in the IDP process is communication with a supervisor, leader, or mentor (Beausaert et al., 2011a; Hobin et al., 2014; Peine, 2008). Exchanges between a supervisor and subordinate are also the basis for building high-quality LMX relationships (Graen & Uhl Bien, 1995). Communication is critical for receiving performance feedback, reflecting, and constructing developmental goals. Kaye and Giuloni (2012), authors of the book Help Them
Grow or Watch Them Go, contend that the most important construct in the IDP process is the supervisor-employee exchange: “Individual development planning is all about the conversation…the magic happens when the two individuals—both committed to growth—come together and talk” (p. 5). Kaye and Giuloni argue that career development is less about filling out forms or designing new assignments and more about quality conversations between supervisors and employees. They describe quality career development conversations as exchanges that “facilitate insights and awareness, explore possibilities and opportunities, and inspire responses that drive employee-owned action” (p. 16). Kaye and Giuloni suggest that short iterative conversations between an employee and supervisor are the ideal way to make use of time-constrained workplaces. These frequent but brief conversations help employees layer awareness and sustain momentum. Additionally, they argued the conversations should contain performance feedback, helping employees check their self-perceptions about strengths and weaknesses.

Feedback, a specific form of communication, is integral to the IDP process (Beausaert et al., 2011b; Hobin et al., 2014; Peine, 2008). Feedback is defined as “actions taken by (an) agent(s) to provide information regarding some aspect(s) of one’s task performance” (Kluger & DeNisi, 1996, p. 255). Feedback is believed to direct and motivate employee actions (Anseel, Lievens, & Schollaert, 2009). Quality and timely performance feedback helps employees recognize competency gaps and then create developmental goals to narrow those gaps (Beausaert et al., 2011b; Kaye & Giuloni, 2012). In turn, improved knowledge and skills are intended to enhance individual and organizational outcomes. However, research on the use of feedback as an intervention tool to increase employee performance is mixed (Kluger & DeNisi, 1996). In a seminal meta-analysis conducted by Kluger and DeNisi (1996), the scholars concluded that feedback had only a moderately positive impact on performance. However, more recent research
looked at the complex nature of feedback, showing that contextual and situational characteristics, not previously considered, play an important role in the feedback process (Norris-Watts & Levy, 2004; Steelman, Levy, & Snell, 2004).

Steelman et al. (2004) proposed the feedback source, credibility, quality, delivery, type (favorable or unfavorable), availability, and organizational stance on feedback-seeking behaviors affected the role of feedback in the workplace. They described these collective variables, used in the daily feedback process, as the feedback environment of an organization. Additionally, employee feedback orientation or overall receptivity to feedback is believed to be a crucial aspect of the process (Gabriel, Frantz, Levy, & Hilliard, 2014; London & Smither, 2002). Feedback orientation describes individuals’ propensity to seek out, critically process, and act on feedback (London & Smither, 2002). A study by Norris-Watts and Levy (2004) revealed that positive feedback environments are related to employees’ level of commitment to the organization and tendency to engage in supportive organizational behaviors (e.g., altruism, sportsmanship, and courtesy). Research by Gabriel et al. (2014) shows that feedback environments and employee orientations work in combination to influence workplace outcomes. For example, in a positive feedback environment, employees who are more receptive to feedback are most likely to find purpose in their work, leading to positive outcomes at the individual and organizational levels.

Thus, the nature and use of feedback as a behavioral intervention is subject to the feedback environment (Steelman et al., 2004) and employee feedback orientation (Gabriel et al., 2014; London & Smither, 2002). Although it may be impractical to develop a unique feedback system for each employee, supervisors may benefit from an understanding of the importance of feedback in the IDP process (Beusaert et al., 2011b; Kaye & Giuloni, 2012) as well as the
supervisor’s role in creating a positive feedback environment (Norris-Watts & Levy, 2004; Steelman et al., 2004) and the influence of employee feedback orientations (Gabriel et al., 2014; London & Smither, 2002).

Reflection

A second component of the IDP process is employee reflection, which is also an important concept in adult education theory as a pedagogic tool designed to enhance individual and organizational learning (Jordi, 2011). Mezirow (1998) described reflection as a “turning back on experience” (p. 185). He states reflection can include “awareness of an object, event or state, including awareness of a perception, thought, feeling, disposition, intention, action, or of one’s habits of doing these things” (p. 185). Reflection has been positively associated with enhanced task performance (Anseel et al., 2009; Embo, Driessen, Valcke, & van der Vleuten, 2015) and workplace learning (Austin et al., 2005; Burman et al., 2014; Lundgren et al., 2017). Additional research also showed that reflection, combined with external feedback, improved task performance (Anseel et al., 2009).

Reflection is considered a critical part of the IDP process, enhancing employees’ learning and goal setting (Beusaert et al., 2011a). Austin et al. (2005) noted the process of identifying learning needs and documenting developmental activities. Establishing learning goals while creating an IDP triggers employee reflection. Kaye and Giuloni (2012) refer to the reflection process as hindsight, “taking stock of where they’ve [employees] been, what they’ve done, and who they are” (p. 29). Once employees consider strengths, weaknesses, values, and preferences, they are better prepared to make decisions about how best to move forward and establish developmental goals (Kaye & Giuloni, 2012).
Goal Setting

The third and final aspect of the IDP process considered in the current study is goal setting. Following communication with a supervisor who provides performance feedback and opportunities for reflection, employees are expected to design learning goals. Locke and Latham (2006), two of the seminal researchers in the field of goal setting in the workplace, state that goal setting theory was developed to “predict, explain, and influence performance on organizational or work-related tasks” (p. 705). They based their work on the premise that goals motivate, direct, and energize employees while also affecting effort and persistence (Locke & Latham, 2002).

One of the most widely researched and accepted aspects of goal setting theory is the premise that difficult goals tend to result in greater effort and persistence by individuals than do easier goals (Bandura, 2001; Locke & Latham, 1990; Zimmerman, 2008). Locke and Latham (1990) found a positive linear relationship existed between the difficulty of a goal and an individual’s performance: the more difficult the goal, the higher the level of performance.

A second advantageous attribute of goal setting is achieved through the development of specific goals. Similar to goal difficulty, specific goals have shown a positive relationship with increased performance (Locke & Latham, 1990; Zimmerman, 2008). Research indicates that specific quantitative goals result in better performance than vague “do your best” or “work at a moderate pace” goals (Locke & Latham, 1990, p. 29). The advantage of a specific goal is that it is easier to gauge successful completion (Zimmerman, 2008). Thus, it is important to assist employees in creating difficult and specific goals during the IDP process with the expectation that well-developed goals will motivate employees to participate in learning activities.
Developmental conversations including performance feedback and reflection are essential precursors to helping employees create the right career goals (Kaye & Giuloni, 2012). Kaye and Giuloni suggest that only after consideration of past experience and personal attributes can employees understand if they want to seek promotion, make a lateral move, or grow in place. After deciding on the what, employees are better prepared to determine the how. If supervisors are aware of the role of performance feedback, reflection, and goal setting, they are in the best position to facilitate employee participation in learning activities. More information on workplace learning and employee activities is found in the following section.

Workplace Learning and Activities

Employee learning is a critical area of study because of its association with positive organizational outcomes (e.g., improved performance, productivity, and work quality); (Park & Jacobs, 2011; Tharenou, Saks, & Moore, 2007). While this study did not measure learning outcomes, it is important for stakeholders to understand the potential benefits associated with employee participation in learning activities. This final section of the literature review provides a more in-depth description of the employee learning activities, developmental strategies, and outcomes associated with workplace learning.

Although literature does not provide a consistent definition of workplace learning, the description provided by Birdi, Allan, and Warr (1997) captures the essence of the varied definitions; they describe workplace learning as “experience giving rise to a relatively permanent change in knowledge, skill, or attitude” (p. 845). It is their definition of workplace learning that was used in this study, and operationalization of the term was achieved by measuring the learning activities the employees used to enhance their knowledge and skills.
In a review of literature on workplace learning, Crouse et al. (2011) identified more than 30 learning strategies, which they grouped into nine categories: 1) taking courses, 2) doing 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. The strategies described by Crouse et al. (2011) are often organized into two major types of learning: formal and informal. Formal learning includes the structured, planned activities that often have a set curriculum and an assigned facilitator (Le Clus, 2011; Manuti et al., 2015). Examples of formal learning are workshops, conferences, certificate-producing courses, and college-level classes. Informal learning, in contrast, describes learning that takes place outside the umbrella of formal learning. Learning is not the aim of the activity but occurs through experience, teamwork, mentoring, and problem solving (Manuti et al., 2015). Informal learning typically occurs as a by-product of day-to-day workplace activities. Manuti et al. (2015) argued that learning in the workplace is often a combination of formal and informal learning working in tandem. Although there is a distinction between the two types of learning, both are considered important for achievement of workplace goals (Crouse et al., 2011; Manuti et al., 2015).

Some of the benefits associated with workplace learning are managing change (Le Clus, 2011; Manuti et al., 2015), improved work motivation, self-efficacy, job satisfaction (Allen, Eby, Poteet, Lentz, & Lima, 2004), and competitive advantage (Manuti et al., 2015; Maurer, Weiss, & Barbeite, 2003). One of the most recent meta-analyses of workplace learning, conducted by Tharenou et al. (2007), evaluated 67 studies focused on the organizational-level outcomes of workplace learning. Tharenou et al. divided the outcomes into three categories: 1) human resource (HR) outcomes (e.g., absenteeism, motivation, and individual job performance), 2) organizational performance outcomes (e.g., service, quality, performance, and productivity), and
3) financial outcomes (e.g., profit and return on investment). Some of the studies looked at more than one outcome, but the most frequently evaluated outcome was performance (57 studies), followed by financial outcomes (28 studies), and finally HR outcomes (19 studies).

The results from the Tharenou et al. (2007) meta-analysis were mixed for the three areas of interest. However, the overall measures indicated organizations that provide more training are likely to have more positive HR and performance outcomes, although the effect in both areas was small. The greatest correlations in the HR performance category were found with worker attitudes (e.g., satisfaction, involvement, and commitment) and human capital (e.g., collective skills and competencies). In the organizational performance category, more than half of all the studies reported a significant positive relationship among training and the outcomes of productivity, sales, and quality. Financial outcomes, the final category of interest, was not significantly related to an organization’s training program. Tharenou et al. (2007) suggest the effect size for financial outcomes may be due to several other predictors that influence the bottom line. The team of researchers also noted that linking training to organizational-level outcomes is complex due to the impact of training quality, the match between training content and organization goals, the organizational environment, and the types of employees participating in the training.

Although the outcomes of employee learning such as improved performance, motivation, and adaptability remain difficult to define, measure, and assess, much of the literature on workplace development shows a strong belief in the benefits of employee learning. Thus, the current study was designed to help organizations understand the constructs that support participation in learning activities and in turn lead to employee learning.
Conclusion

Chapter 2 examined scholarly research related to the constructs of organizational culture, LMX, IDPs, and employee learning. Each construct was defined, and relevant literature was explored to show the connection between the constructs and employee participation in learning activities. A detailed description of the methods used to research the relationship among the constructs is provided in Chapter 3.
CHAPTER 3

METHODOLOGY

Chapter 3 describes the methods used to study the professional development program in a midwestern, U.S.-based, manufacturing organization. It expands on the research design, participants, data collection procedures, instrumentation, pilot study, and data analysis methods. The purpose of the study was to investigate the relationship among organizational culture, LMX, IDPs, and employee participation in learning activities. The data collected from the study were analyzed to explore the following hypotheses and research question:

H1: Learning cultures are positively related to employee participation in learning activities.

H2: Higher quality leader-member exchange relationships are positively related to employee participation in learning activities.

H3: Individual development plan use is positively related to employee participation in learning activities.

RQ: Does education level, time at organization, time with supervisor, age, and/or gender influence the relationship among organizational culture, LMX, IDPs, and employee participation in learning activities?

Research Design

This study used survey methodology with a quantitative design to explore the relationship among organizational culture, leader-member exchange (LMX), individual development plans (IDPs), and employee participation in learning activities. Surveys are used to research trends, attitudes, and thoughts of individuals by studying a representative sample of a population.
The aim of survey research is to provide a numeric measurement that allows exploration of associations in a sample population with the potential to generalize the findings to the larger population (Creswell & Creswell, 2018).

Survey methodology was chosen for this study because it allowed for research of a larger sample over a shorter time span than would be possible with qualitative research (Creswell & Creswell, 2018; Dillman, Smyth, & Christian, 2014; Mertens, 2015). With the aid of statistical analysis software, the survey design also allowed for simplified analysis of data by measuring descriptive, inferential, and associational information (Vogt, 2007). The current study used a simple descriptive, one-time, web-based survey, which allowed for faster responses and analysis than paper, telephone, or in-person surveys (Dillman et al., 2014; Mertens, 2015).

Participants

Participants for this study were full-time U.S.-based employees who worked in a midwestern manufacturing organization. The organization utilized the IDP as a tool to promote employee development. The IDP program had been in place for approximately 13 years at the time of data collection and was used to encourage learning and growth for salaried (non-hourly) employees. The organization had a population of 98 IDP users in its two U.S.-based manufacturing plants.

Convenience and purposive sampling were utilized to survey employees within the organization who were required to use the IDP for development in the workplace. Purposive sampling allows for collection of data from specific members of a population who have knowledge/understanding of a particular topic (Mertens, 2015). In this study, only employees who were required to complete IDPs were recruited for participation.
Data Collection

Data were collected using a one-time, web-based online survey delivered through employee email. The survey was hosted on Qualtrics, a software supported by the researcher’s university. Qualtrics allowed the participants to use computers, tablets, or smart phones to access and complete the survey.

Mixed-Mode Methodology

A mixed-mode method was used for data collection. Mixed-mode surveying describes three basic strategies for contacting participants and collecting data: 1) use of multiple approaches (e.g., mail, phone, or email) to encourage participation in a survey with one response mode; 2) use of a single-contact mode to enhance participation using multiple response modes (e.g., paper questionnaire, web-based survey, or in-person interview); and 3) use of multiple contact and response modes for a single study (Dillman et al., 2014). Research shows that mixed-mode surveying can reduce survey coverage error, reduce cost, and improve response rates (Dillman et al., 2014).

The current study relied on a single mode for collection of data with multiple modes of communication to encourage response. Employees were notified of their selection to participate via a physical postcard delivered to their workspace (see Appendix A). The postcard was followed by an initial email and two reminder emails encouraging participation in the study.
Participant Consent and Confidentiality

Participant consent information was presented on the first page of the survey. The consent information provided assurance of anonymity to participants and a guarantee that results would be reported in a manner that prevented identification of individuals. Employees were reminded they could withdraw from the study at any time. Next, participants were asked to complete the five distinct survey sections: organizational culture, leader-member exchange, individual development plans, learning activities, and demographics.

Survey Instrument

Organizational Learning Culture

Organizational learning culture was measured using a shortened version of the 43-item Dimensions of the Learning Organization Questionnaire (DLOQ; Marsick & Watkins, 2003). The questionnaire was designed to measure an organization’s environment, structure, and operations to determine their influence on individual learning. Marsick and Watkins identified seven dimensions of a learning culture: 1) create continuous learning opportunities, 2) promote inquiry and dialogue, 3) encourage collaboration and team learning, 4) create systems to capture and share learning, 5) empower people toward a collective vision, 6) connect the organization to its environment, and 7) provide strategic leadership for learning. To measure the seven constructs, the DLOQ was delivered to a nonrandom sample of 836 employees in multiple organizations (Yang, 2003). The overall reliability estimate for the full scale was reported at $\alpha = .96$ for Cronbach’s alpha (Yang, 2003).
Two shortened versions of the DLOQ (21-item and 7-item scales) were also analyzed. The 21-item scale showed an overall reliability estimate of .93 (Yang, 2003). The seven-item scale using one representative item from each of the seven dimensions had an overall reliability estimate of .84 (Yang, 2003).

Because the intent of this study was to look at general employee perceptions of the learning culture in their organization, the seven-item scale was used. Karen Watkins granted permission to use the shortened scale in the current study if the questions and response format were not altered. The dimensions of the learning organization questionnaire seven-item scale include:

1. In my organization, people are rewarded for learning.
2. In my organization, people spend time building trust with each other.
3. In my organization, teams/groups revise their thinking as a result of group discussions or information collected.
4. My organization makes its lessons learned available to all employees.
5. My organization recognizes people for taking initiative.
6. My organization works together with the outside community to meet mutual needs.
7. In my organization, leaders continually look for opportunities to learn. (Marsick & Watkins, 2003)

Additionally, the shorter scale helped to keep the number of survey items manageable for the participants, as time and length are factors in respondent completion of surveys (Dillman et al., 2014). The scale was measured using a six-point Likert-type scale with “almost never” (1) and “almost always” (6) as the anchors.

**Leader-Member Exchange**

Employee-supervisor relationship quality was measured using the LMX-7 Questionnaire. The scale was first developed by Graen, Novak, and Sommerkamp (1982) and had a Cronbach’s alpha reliability between of $a = .80$ to $a = .90$ (Graen & Uhl-Bien, 1995) for the single dimension
of leader-member relationship quality. Studies that argued for the multidimensional aspects of the scale had mixed results (Graen & Uhl-Bien, 1995). Thus, this study focused on the single construct (relationship quality) of the LMX-7. Permission to use the survey tool was granted by Mary Uhl-Bien without restriction. Minor adaptations to the original scale were applied. For example, “leader” was replaced with “immediate supervisor” and “he/she” was replaced with “they or their.”

The original LMX-7 Questionnaire was measured using multiple response options. To increase clarity and consistency, each item was rewritten in the form of a statement and evaluated with one response scale. For example, “To what degree do you know how satisfied your immediate supervisor is with what you do?” was reworded as, “I know how satisfied my immediate supervisor is with what I do.” See the revised version of each item in brackets.

1. To what degree do you know how satisfied your immediate supervisor is with what you do?
   [Revised: I know how satisfied my immediate supervisor is with what I do.]
2. How well does your immediate supervisor understand your problems and needs?
   [Revised: My immediate supervisor understands my problems and needs.]
3. How well does your immediate supervisor recognize your potential?
   [Revised: My immediate supervisor recognizes my potential.]
4. Regardless of how much formal authority your immediate supervisor has built into their position, what are the chances that your immediate supervisor would use their power to help you solve problems in your work?
   [Revised: My immediate supervisor would use their power to help solve the problems in my work.]
5. Again, regardless of the amount of formal authority your immediate supervisor has, what are the chances that they would “bail you out,” at their expense?
   [Revised: My immediate supervisor would “bail me out” at their expense.]
6. I have enough confidence in my immediate supervisor that I would defend their decision if they were not present to do so.
   [No revision needed.]
7. How would you characterize your working relationship with your immediate supervisor? [Revision: I have a good working relationship with my immediate supervisor.]

(Graen & Uhl-Bien, 1995)
Each of the statements was measured on a six-point Likert-type scale: 1) strongly agree, 2) agree, 3) somewhat agree, 4) somewhat disagree, 5) disagree, and 6) strongly disagree.

**Individual Development Plan**

IDP use was measured using a researcher-developed scale. A review of literature on individual development plans revealed just one survey tool established to measure IDPs in the workplace. The tool, the Personal Development Plan Practice Questionnaire (PPQ), was created by Beausaert et al. (2011a). Although the scale is not used in this study, it did serve in an influencing role. A second scale, the Interpersonal Communication Satisfaction Inventory (ICSI) developed by Hecht (1978), also influenced the communication and feedback portion of the survey. The researcher developed 12-item Individual Development Plan Questionnaire was used to measure the IDP functions in this study. As described in Chapter 2, the questions measured the IDP constructs of communication/feedback, reflection, and goal setting.

**Communication/Feedback**
1. Developmental conversations with my supervisor provide me with valuable information about my job performance.
2. I feel satisfied with the frequency of conversations with my supervisor about my professional development.
3. My supervisor informs me of the benefits of learning new information and/or skills.
4. I would like to continue to have developmental conversations with my supervisor.

**Reflection**
5. Performance feedback from my supervisor is useful when completing my IDP.
6. The IDP process causes me to think about my development plan.
7. Thinking about my development helps me recognize the gaps in my competencies.
8. I learned about my strengths by participating in the IDP process.

**Goal Setting (Difficult and Specific)**
9. I challenge myself with the goals I create during the IDP process.
10. The developmental goals I create during the IDP process are designed to move me beyond my comfort zone.
11. Writing developmental goals helps me understand the steps I need to take to be successful in the workplace.
12. I set clear goals that will help me achieve my developmental plan.
The researcher-developed IDP questionnaire was measured using a six-point Likert-type scale: 1) strongly agree, 2) agree, 3) somewhat agree, 4) somewhat disagree, 5) disagree, and 6) strongly disagree. The first use of the 12-item scale resulted in a Cronbach’s alpha score of .91.

**Learning Activities**

The survey items used to evaluate employee learning in the current study did not distinguish between the two types of learning (formal and informal) nor did the items attempt to differentiate among individual, group, or organizational-level learning. No attempt was made to place value on one type of learning activity over another. Instead, the survey items were designed to collectively assess employee engagement in workplace learning. Learning activities were measured using a scale developed by Bezuijen et al. (2010). Permission was received from Xander Bezuijen to use the scale without restriction. The eight-item Employee Engagement in Learning Activities Scale measured how frequently employees participated in specific learning activities.

1. I spend time following a course or educational program.
2. I am working to extend my knowledge and skills.
3. I perform learning tasks that are not part of my job.
4. I spend time planning and realizing my career.
5. I go to my supervisor to discuss how I can make progress.
6. Within my task responsibilities, I actively look for methods to improve my work.
7. Within my job, I look for activities from which I can learn.
8. I continually learn new skills for my job. (Bezuijen et al., 2010)

Tests of the scale presented resulted in a Cronbach’s alpha of .85 for reliability. The original scale used a five-point frequency scale from very often to never to measure employee participation in learning activities. To increase consistency in response options throughout the
survey, the items were measured using a six-point Likert-type scale: 1) strongly agree, 2) agree, 3) somewhat agree, 4) somewhat disagree, 5) disagree, and 6) strongly disagree.

**Demographics**

The final section of the survey instrument included demographic questions. Research recommends demographic questions be placed at the end of a survey because participants may consider the information sensitive (Patten, 2014) or the questions may confuse respondents about the purpose of the survey (Orcher, 2007). If asked at the end of a survey, participants reluctant to share personal information may be inclined to divulge the data, having already answered the rest of the survey items (Patten, 2014). Demographic questions should also be limited to the information needed to answer the research question and/or provide details about the population sample (Orcher, 2007). Thus, the demographics section in this study was limited to six questions.

1. Select your highest level of education completed:
   - Less than a high school graduate; High school graduate; Some college; Associate’s Degree; Bachelor’s Degree; Graduate Degree(s)

2. How many years have you been employed at the current organization? _____

3. How many years have you worked directly for your current supervisor? _____

4. What is your current age? _____

5. To which gender identity do you most identify?
   - Female; Male; Not Listed

6. What is your ethnic origin?
   - Asian; Black or African American; Hispanic or Latino; Native American or American Indian; Pacific Islander; White/Caucasian; Not Listed

Each of the categories in the survey instrument portion of Chapter 3 details the distinct sections of the survey tool used to collect data about organizational culture, LMX, IDPs, learning
activities, and participant demographics. The collected data were intended to provide information about the conditions most likely to promote learning in the workplace and paint a picture about the role gender, age, education level, and work experience play in employees’ motivation to participate in learning activities.

Pilot Study

This section of Chapter 3 provides an overview of the methods used to pilot the survey tool for the current study. The description includes details about the pilot process, participants, and analysis of the data collected in the pilot phase.

Process

Pilot studies are considered essential when new survey questionnaires are established (Dillman et al., 2014), as is the case with the IDP portion of the scale. Pilot studies help reduce issues with survey construction and delivery while also ensuring the scale provides the researcher with needed information (Creswell & Creswell, 2018; Dillman et al., 2014; Fink, 2006; Mertens, 2015). Creswell and Creswell note that pilot “testing is important to establish the content validity of scores on an instrument . . . and to improve questions, format and instructions” (p. 154).

When piloting a survey, Dillman et al. (2014) recommend obtaining feedback from content, questionnaire, and analysis experts, followed by distribution of the survey to a small sample of participants. Thus, the pilot for this study was conducted in three phases: expert review, pilot sample, and analysis.
Phase I: Expert Review

Phase I of the pilot study consisted of a review of the survey tool by two academic professionals and a senior human resource (HR) employee at the participating organization. The academic professionals had extensive knowledge of the research topic and expertise in survey/questionnaire design. Questionnaire experts assist in identifying problems related to the order of questions, balance of responses, and/or language choice that may bias respondent answers (Dillman et al., 2014). Additionally, the academic experts also helped to identify issues with the survey layout and quality of directions.

The survey was also provided to a senior HR leader in the participating organization for content review. The focus of the content expert is to identify issues related to technical language/jargon, item responses, and inaccurate information (Dillman et al., 2014). Content participants also provide important feedback on the clarity of survey directions.

Each of the three experts received an electronic copy of the questions in a Word document as well as access to the online survey. One of the academic experts and the HR professional provided written feedback via email. The other academic expert participated in a read-aloud session with the researcher.

Phase II: Pilot Sample

Three graduate students from the researcher’s institution (one each from the English and Curriculum and Instruction Departments, and the School of Law) agreed to participate in individual read-aloud sessions. The students did not have knowledge of the topic or research
experience with surveys, but they were able to provide feedback related to clarity of directions and survey items.

Phase III: Analysis

Once the feedback was collected from the experts and read-aloud participants, minor adjustments were made to improve the clarity of directions, survey items, and the format. Following modification of the directions and individual items, the survey was ready for distribution to employees.

Final Study

In the final study, a mixed-mode method was utilized for contacting employees (i.e., postcard and email) with a single mode for data collection (web-based survey). Participants were notified of their selection via a physical postcard delivered to their workstations (see Appendix A). The postcard shared information about the researcher and the topic of study and asked for employee participation. Approximately three days after delivery of the postcard, employees received an email through their work account requesting their participation in the research and included a hyperlink and QR code to access the survey. Within the 14-day collection window, reminder emails encouraging employees to participate were sent on days 7 and 12 (see Appendix B).

To explore the study’s three hypotheses and research question, the Statistical Package for Social Sciences (SPSS) was utilized to produce the descriptive and relational statistics. Descriptive statistics such as the means, standard deviation, and range of scores were used to
analyze each variable in the study (organizational culture, LMX, IDP, learning activities, and participant demographics).

Correlation and regression analyses were also conducted to determine the degree of relationship among the variables (organizational culture, LMX, IDP, learning activities, and demographics). Finally, reliability scores for internal consistency of the organizational culture, LMX, IDP, and learning activities scales were measured using Cronbach’s alpha coefficient (Gravetter, Wallau, & Forzano, 2018; Mertens, 2015).

Conclusion

Chapter 3 detailed the quantitative methods utilized to study the professional development program at a U.S. midwestern organization. Following a three-phase pilot of the survey instrument, purposeful sampling was used to deliver a one-time, web-based survey to employees who use IDPs in the workplace. Data were analyzed with descriptive and relational statistics with the aid of SPSS.
CHAPTER 4

RESULTS

Chapter 4 presents the results of the data analysis. The purpose of the study was to investigate the relationship among organizational culture, leader-member exchange (LMX) quality, individual development plans (IDP), and employee participation in learning activities. This chapter starts with a description of the research participants and is organized by the hypotheses and research question.

Description of Participants

The survey was sent to 98 employees working in a mid-sized, midwestern manufacturing company. A total of 66 employees (67%) responded to the survey. Twelve employees answered “No” to the initial screening question that asked if the employee was currently using an IDP and were automatically exited from the survey. Only employees who were currently using IDPs and answered “Yes” to the screening question were allowed to participate in the study. An additional four participants completed fewer than four of the 40 questions, so their data were not included in the analysis. The remaining 50 participants completed the survey (n = 50). Table 1 describes the demographic information for the survey participants.
Table 1

Participant Demographic Information

<table>
<thead>
<tr>
<th>Category/Range</th>
<th>Number of Participants</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>26%</td>
</tr>
<tr>
<td>Male</td>
<td>37</td>
<td>74%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>6</td>
<td>12%</td>
</tr>
<tr>
<td>White</td>
<td>41</td>
<td>82%</td>
</tr>
<tr>
<td>Not Listed</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Some College</td>
<td>8</td>
<td>16%</td>
</tr>
<tr>
<td>Associate</td>
<td>4</td>
<td>8%</td>
</tr>
<tr>
<td>Bachelor</td>
<td>21</td>
<td>42%</td>
</tr>
<tr>
<td>Graduate</td>
<td>15</td>
<td>30%</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24-33</td>
<td>14</td>
<td>28%</td>
</tr>
<tr>
<td>34-43</td>
<td>19</td>
<td>38%</td>
</tr>
<tr>
<td>44-53</td>
<td>11</td>
<td>22%</td>
</tr>
<tr>
<td>54-63</td>
<td>5</td>
<td>10%</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Time with Supervisor</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 1 years</td>
<td>20</td>
<td>40%</td>
</tr>
<tr>
<td>1.1 - 3 years</td>
<td>26</td>
<td>52%</td>
</tr>
<tr>
<td>3.1 - 6 years</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>6.1 - 9 years</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>9.1 - 12 years</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Time at Organization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 5 years</td>
<td>26</td>
<td>52%</td>
</tr>
<tr>
<td>5.1 - 10 years</td>
<td>11</td>
<td>22%</td>
</tr>
<tr>
<td>10.1 - 15 years</td>
<td>3</td>
<td>6%</td>
</tr>
<tr>
<td>15.1 - 20 years</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>20.1 - 25 years</td>
<td>6</td>
<td>12%</td>
</tr>
<tr>
<td>25.1 - 30 years</td>
<td>2</td>
<td>4%</td>
</tr>
</tbody>
</table>

The demographics in Table 1 show the participating employees were well educated, with 72% having achieved a minimum of a bachelor’s degree. Thus, the results of the study may not be generalizable to a population of less educated employees. Forty percent of the employees had
one year or less with their current supervisor, which may have influenced the progression of LMX relationships.

Data Analysis Process and Assumptions

Prior to analysis, survey items for the LMX, IDP, and learning activity scales were reverse coded; each scale was calculated with the higher score as a positive indicator: 6 = strongly agree, 1 = strongly disagree. The organizational culture scale was already coded with 6 = almost always, 1 = almost never; thus, the data were analyzed in its original form. Throughout the analysis, significance was calculated at $\alpha = .05$ unless specifically indicated.

An initial screening of individual scale items revealed the answers for numerous questions were skewed. However, no bimodal distribution was observed. Therefore, the data were analyzed without transformation.

Hypotheses and Research Question Results

To answer the three hypotheses and research question in the current study, data were collected using three previously validated scales: Dimensions of the Learning Organization Questionnaire (Marsick & Watkins, 2003), LMX-7 Questionnaire (Graen & Uhl-Bien, 1995), and the Learning Activities Scale (Bezuijen et al., 2010). The final scale, Individual Development Plans, was researcher created.

Scale Reliability

Table 2 shows the reliability scores for each the four survey scales as measured in the current study.
Cronbach’s alpha, the most widely reported reliability statistic, is measured on a 0.0 – 1.0 scale (Vogt, 2007). An alpha of .70 or higher is generally considered satisfactory for most research purposes (Field, 2018; Vogt, 2007). In this study, each of the four scales, measured using Cronbach’s alpha, demonstrated a high level of reliability (see Table 2). Review of the items in each scale also showed high inter-item correlations for individual items; thus, all the questions were retained for further analysis.

**Correlation Testing Hypothesis 1, Hypothesis 2, and Hypothesis 3**

The research hypotheses were analyzed by testing their relationships with Pearson’s correlation statistics (r). See Tables 3 and 4 for correlation and descriptive information for H1, H2, and H3.
Table 3

Correlations

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. OC</td>
<td>1</td>
<td>.418**</td>
<td>.427**</td>
<td>.320*</td>
</tr>
<tr>
<td>2. LMX</td>
<td>.418**</td>
<td>1</td>
<td>.563**</td>
<td>.255*</td>
</tr>
<tr>
<td>3. IDP</td>
<td>.427**</td>
<td>.563**</td>
<td>1</td>
<td>.469**</td>
</tr>
<tr>
<td>4. LA</td>
<td>.320*</td>
<td>.255*</td>
<td>.469**</td>
<td>1</td>
</tr>
</tbody>
</table>

*Correlation is significant at the p < .05 level.
**Correlation is significant at the p < 0.01 level.
OC = Organizational culture, LMX = Leader-member exchange, IDP = Individual development plan, LA = Learning activities

Table 4

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>OC</th>
<th>LMX</th>
<th>IDP</th>
<th>LA</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Mean</td>
<td>3.70</td>
<td>4.73</td>
<td>4.59</td>
<td>4.80</td>
</tr>
<tr>
<td>Median</td>
<td>3.64</td>
<td>5.00</td>
<td>4.75</td>
<td>4.87</td>
</tr>
<tr>
<td>Mode</td>
<td>3.29</td>
<td>5.00</td>
<td>4.92</td>
<td>4.88</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.89</td>
<td>1.01</td>
<td>0.78</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Hypothesis 1

H1: Learning cultures are positively related to employee participation in learning activities.

Analysis of the correlation between learning cultures and learning activities indicates H1 is supported: $r(48) = .320$, $p = .012$, showing a medium effect size. The result indicates that the more positively employees perceived their organization’s learning culture, the more likely they were to participate in learning activities.
**Hypothesis 2**

H2: Higher-quality leader-member exchange relationships are positively related to employee participation in learning activities.

Analysis of the correlation between high-quality leader-member exchange relationships and learning activities indicates H2 is supported: $r(48) = .255, p = .037$, with a small to moderate effect size. The higher the LMX quality, the more likely an employee was to participate in learning activities.

**Hypothesis 3**

H3: Individual development plan use is positively related to employee participation in learning activities.

Analysis of the correlation between IDP use and employee participation in learning activities indicates H3 is also supported: $r(48) = .469, p = .001$, showing a medium to large effect size. The results indicate that the more positive the perception of the IDP, the more likely an employee was to participate in learning activities.

**Post Hoc Regression Analysis**

Based on the positive relationship of organizational culture, LMX, and IDPs on employee participation in learning activities, post hoc regression analysis was conducted to determine which of the three variables was the most important in predicting employee participation in learning activities. Understanding the level of influence is important for leaders who wish to make efficient use of learning resources (e.g., time and money).
Data Screening

Results of the data screening for the regression analysis are shown in Table 5 and Figures 2 and 3.

Table 5

Casewise Diagnostics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Criterion for problematic cases</th>
<th>IDs for problematic cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized residuals</td>
<td>$</td>
<td>z_{res}</td>
</tr>
<tr>
<td>Cook’s distances</td>
<td>Value $&gt; 1.0$</td>
<td>None</td>
</tr>
<tr>
<td>Leverage values</td>
<td>Value $&gt; 2 \frac{(k + 1)}{n}$</td>
<td>2, 7, 9, 22, 23, 26</td>
</tr>
<tr>
<td></td>
<td>$2 \frac{3 + 1}{50} = .16$</td>
<td></td>
</tr>
<tr>
<td>Covariance ratio (CVR)</td>
<td>Value $&lt; 1 - \frac{3(k + 1)}{n}$</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>$1 - \frac{3(3 + 1)}{50} = -.22$</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2: Histogram of standardized residuals.
Normality of the data was assessed through casewise diagnostics testing and a review of the histogram of standardized residuals and P-P plot (see Table 5 and Figure 3). Analysis showed the regression assumption of normality was met. A review of the scatterplot of standardized vs. predicted residual values indicates the regression assumption of homoscedasticity was also met (see Figure 4).

Box and whisker plots were examined for each variable to evaluate the presence of outliers. Additional tests for multicollinearity were also conducted. The eigenvalue calculation suggested some multicollinearity existed; however, multicollinearity was not indicated when looking at correlation, VIF, and tolerance values. Therefore, multicollinearity was not problematic for the current regression analysis.
Regression Analysis

Regression analysis of the model showed organizational culture, LMX, and IDPs significantly predict employee participation in learning activities, $F(3, 50) = 4.830, p = .005$ (see Table 6).

Table 6

Multiple Forced Entry Regression OC, LMX, IDP

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.489a</td>
<td>.240</td>
<td>.190</td>
<td>.58082</td>
<td>4.830</td>
<td>0.005</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), IDP, Organizational Culture, LMX
b. Dependent Variable: Learning Activities
Analysis shows 24% of the total variability in an employee’s participation in learning activities was explained by organizational culture, LMX, and IDP use.

A review of the standard regression coefficients (see Table 7) indicates organizational members who increased their involvement in IDPs also participated in learning activities more frequently. Table 7 shows the influence of IDPs on learning activities was stronger than the impact of LMX or organizational culture for the participating employees.

Table 7
Regression Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>OC</td>
<td>0.11</td>
<td>0.106</td>
<td>0.158</td>
</tr>
<tr>
<td>LMX7</td>
<td>-0.035</td>
<td>0.103</td>
<td>-0.055</td>
</tr>
<tr>
<td>IDP</td>
<td>0.356</td>
<td>0.132</td>
<td>0.433</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Learning Activities

Research Question Testing

The study used correlation and hierarchical regression analysis to answer the research question.

RQ: Does education level, time at organization, time with supervisor, age, and/or gender influence the relationship among organizational culture, LMX, IDPs, and employee participation in learning activities?
Tables 8 and 9 provide the correlational and descriptive data for the variables included in the analysis of employee demographic information.

Table 8

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. OC</td>
<td>1</td>
<td>.418*</td>
<td>.427**</td>
<td>.320*</td>
<td>-0.272</td>
<td>0.030</td>
<td>0.071</td>
<td>-0.180</td>
<td>0.137</td>
</tr>
<tr>
<td>2. LMX</td>
<td>.418*</td>
<td>1</td>
<td>.563**</td>
<td>0.255</td>
<td>-0.013</td>
<td>0.062</td>
<td>0.199</td>
<td>-0.055</td>
<td>0.219</td>
</tr>
<tr>
<td>3. IDP</td>
<td>.427**</td>
<td>.563**</td>
<td>1</td>
<td>.469**</td>
<td>-0.130</td>
<td>0.002</td>
<td>0.179</td>
<td>-0.250</td>
<td>-0.076</td>
</tr>
<tr>
<td>4. LA</td>
<td>.320*</td>
<td>0.255</td>
<td>.469**</td>
<td>1</td>
<td>-0.045</td>
<td>-.346*</td>
<td>.302*</td>
<td>-.375**</td>
<td>0.037</td>
</tr>
<tr>
<td>5. Education Level</td>
<td>-0.272</td>
<td>-0.013</td>
<td>-0.130</td>
<td>-0.045</td>
<td>1</td>
<td>-0.272</td>
<td>0.092</td>
<td>0.092</td>
<td>-0.042</td>
</tr>
<tr>
<td>6. Time at Organization</td>
<td>0.030</td>
<td>0.062</td>
<td>0.002</td>
<td>-.346*</td>
<td>-0.272</td>
<td>1</td>
<td>0.183</td>
<td>.439**</td>
<td>.295*</td>
</tr>
<tr>
<td>7. Time with Supervisor</td>
<td>0.071</td>
<td>0.199</td>
<td>0.179</td>
<td>.302*</td>
<td>0.092</td>
<td>0.183</td>
<td>1</td>
<td>0.140</td>
<td>0.214</td>
</tr>
<tr>
<td>8. Age</td>
<td>-0.180</td>
<td>-0.055</td>
<td>-0.250</td>
<td>-.375**</td>
<td>0.092</td>
<td>.439*</td>
<td>0.140</td>
<td>1</td>
<td>0.111</td>
</tr>
<tr>
<td>9. Gender</td>
<td>0.137</td>
<td>0.219</td>
<td>-0.076</td>
<td>0.037</td>
<td>-0.042</td>
<td>.295*</td>
<td>0.214</td>
<td>0.111</td>
<td>1</td>
</tr>
</tbody>
</table>

*Correlation is significant at the p < .05 level (2-tailed).
**Correlation is significant at the p < 0.01 level (2-tailed).
OC = Organizational culture, LMX = Leader-member exchange, IDP = Individual development plan, LA = learning activities

Pearson r analysis of the demographic variables revealed a medium effect size for the correlation between time at organization, time with supervisor, and age with participation in learning activities. The correlations between employee education level, gender, and participation
in learning activities were not significant. Therefore, employee education level and gender were eliminated from further analysis. Table 9 shows the descriptive statistics for the variables included in the regression analysis for the research question.

<table>
<thead>
<tr>
<th></th>
<th>OC</th>
<th>LMX</th>
<th>IDP</th>
<th>LA</th>
<th>Time at organization</th>
<th>Time with Supervisor</th>
<th>Current Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>49</td>
</tr>
<tr>
<td>Mean</td>
<td>3.70</td>
<td>4.73</td>
<td>4.59</td>
<td>4.80</td>
<td>8.25</td>
<td>2.16</td>
<td>39.92</td>
</tr>
<tr>
<td>Median</td>
<td>3.64</td>
<td>5.00</td>
<td>4.75</td>
<td>4.87</td>
<td>5.00</td>
<td>2.00</td>
<td>39.00</td>
</tr>
<tr>
<td>Mode</td>
<td>3.29</td>
<td>5.00</td>
<td>4.92</td>
<td>4.88</td>
<td>3.00</td>
<td>1.0&lt;sup&gt;a&lt;/sup&gt;</td>
<td>33&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.89</td>
<td>1.01</td>
<td>0.78</td>
<td>0.65</td>
<td>8.00</td>
<td>2.07</td>
<td>9.53</td>
</tr>
</tbody>
</table>

a. Multiple modes exist. The smallest value is shown.

**RQ Data Screening**

Blockwise hierarchical regression analysis was conducted to determine if an employee’s time at the organization, time with supervisor, and/or age influenced learning activities when controlling for organizational culture, LMX, and IDPs. Normality of the data was assessed through casewise diagnostics testing and a review of the histogram of standardized residuals and P-P plot (see Table 10 and Figures 5 and 6).
Table 10

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Criterion for problematic cases</th>
<th>IDs for problematic cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized residuals</td>
<td>$</td>
<td>z_{res}</td>
</tr>
<tr>
<td>Cook’s distances</td>
<td>Value &gt; 1.0</td>
<td>None</td>
</tr>
<tr>
<td>Leverage values</td>
<td>Value &gt; $2(k + 1)/n$</td>
<td>11, 22</td>
</tr>
<tr>
<td></td>
<td>$2(6 + 1)/50 = .28$</td>
<td></td>
</tr>
<tr>
<td>Covariance ratio (CVR)</td>
<td>Value &lt; $1-[3(k + 1)/n]$</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>$1-[3(6 + 1)]/50 = .58$</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5: Histogram normality of residuals.
Analysis showed the regression assumption of normality was met (see Figure 5). A review of the scatterplot of standardized vs. predicted residual values also indicated the regression assumption of homoscedasticity was met (Figure 7). Box and whisker plots were also examined for each variable to evaluate the presence of outliers.
Additional tests for multicollinearity were also conducted. The eigenvalue calculation suggested some multicollinearity existed; however, multicollinearity was not indicated when looking at correlation, VIF, and tolerance values. Therefore, multicollinearity was not problematic for the regression analysis.

**RQ Hierarchical Regression Analysis**

Hierarchical regression analysis showed time at organization, time with supervisor, and age added significant predictive variance on employee participation in learning activities beyond that of organizational culture, LMX, and IDPs: $F(6, 50) = 6.196, p < .001$ (see Table 11).

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.489&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.240</td>
<td>0.189</td>
<td>0.58121</td>
<td>0.240</td>
</tr>
<tr>
<td>2</td>
<td>.685&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.470</td>
<td>0.394</td>
<td>0.50247</td>
<td>0.230</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), LMX, OC, IDP  
b. Predictors: (Constant), LMX, OC, IDP, Time at organization, Time with supervisor, Age

Analysis showed 47% of the total variability in an employee’s participation in learning activities was explained by organizational culture, LMX, IDP use, time at the organization, time with supervisor, and age. When controlling for organizational culture, LMX, and IDP, time at the organization and time with supervisor were both statistically significant predictors of employee participation in learning activities (see Table 12).
Table 12

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>IDP</td>
<td>0.356</td>
<td>0.134</td>
</tr>
<tr>
<td></td>
<td>OC</td>
<td>0.115</td>
<td>0.107</td>
</tr>
<tr>
<td></td>
<td>LMX</td>
<td>-0.035</td>
<td>0.104</td>
</tr>
<tr>
<td>2</td>
<td>IDP</td>
<td>0.273</td>
<td>0.120</td>
</tr>
<tr>
<td></td>
<td>OC</td>
<td>0.114</td>
<td>0.094</td>
</tr>
<tr>
<td></td>
<td>LMX</td>
<td>-0.033</td>
<td>0.091</td>
</tr>
<tr>
<td></td>
<td>Current Age</td>
<td>-0.011</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>Time at organization</td>
<td>-0.027</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>Time with Supervisor</td>
<td>0.102</td>
<td>0.037</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Learning Activities

Results suggest the longer an employee worked at the organization, the less likely they were to participate in learning activities. In contrast, the more time an employee spent with their supervisor, the more likely they were to be involved in learning. Employee age was not a statistically significant predictor of employee participation in learning activities when the other variables were considered.

Summary

Chapter 4 described the survey participants and the results of the analysis for the study’s three hypotheses and research question. Post hoc regression analysis was also reported for the
relationship among organizational culture, LMX, and IDPs on employee participation in learning activities. The results show that organizational culture, LMX, and IDPs are positively related to employee participation in learning activities, with IDPs being the most important predictor. Time with organization and time with supervisor were also significant predictors of employee engagement in learning activities. Discussion of the results, implications, limitations of the study, and recommendations for future research are addressed in Chapter 5.
CHAPTER 5

DISCUSSION OF FINDINGS

The purpose of this study was to investigate the relationship among organizational culture, leader-member exchange (LMX) quality, individual development plans (IDP), and employee participation in learning activities. The preceding chapters examined existing literature about the constructs and outlined results from the current study. This chapter includes a discussion of the findings, implications for the field, limitations of the research, and recommendations for future studies.

Discussion of Findings and Implications

Similar to previous findings in literature, learning cultures, LMX relationships, and IDPs all had positive correlations with learning activities. Thus, H1, H2, and H3 were all supported, as shown in Figure 8.

![Figure 8: Diagram of relationship among variables.](The connecting arrows in the figure are intended to show correlation, not causation.)
The findings suggest that learning cultures, LMX, and IDPs are interrelated constructs (as shown in Figure 8) that help motivate employees to participate in learning activities. A detailed discussion of the findings, organized by the research inquiries, follows.

Learning Cultures

Findings

H1 explored the relationship between learning cultures and employee involvement in learning activities. Culture describes the collective values, norms, and standards of a group (Schein, 2010), and previous studies revealed the influential role of culture on the thoughts and behaviors of individuals (Cameron & Quinn, 2011; Crouse et al., 2011; Froehlich et al., 2014; Schein, 2010).

The culture explored in this study was a learning culture, and the data confirm earlier findings that learning cultures were positively related to employee participation in learning activities (Bezuijen et al., 2009; Froehlich et al., 2014). Workplace culture, according to Schein (2010), exists on three levels, with each level possessing varying degrees of influence. At the third and deepest level, culture is so entrenched that little deviation is found in the thoughts and actions of individuals who are a part of that organization. Positive learning cultures are known by their ability to promote and support learning in the workplace (Marsick & Watkins, 2003; Schein, 2010). As hypothesized, the findings showed a positive correlation between learning cultures and engagement in learning activities, with a moderate effect size. Based on the organizational mean score of 3.7 out of a possible high score of 6, it appears the participants believed their organization had at least some of the elements that make up a learning culture, and
the more positively they perceived the learning culture, the more likely they were to participate in learning activities. However, use of the shortened Dimensions of the Learning Organization Questionnaire did not allow for identification of the individual elements of a learning culture that were perceived to be present in the organization.

The correlation between learning cultures and participation in learning activities was not surprising, but it is worth highlighting as learning cultures and IDP use are inextricably linked. Field notes gathered at the cooperating organization revealed specific examples of how this company fostered a learning culture as the employees shared some of the cultural attributes (Marsick & Watkins, 2003) they felt best supported their development. It was their belief that learning organizations should provide time to participate in training, attend conferences, complete certifications, and earn degrees. Perhaps equally important was reimbursement of expenses for training, travel, and tuition. They noted that on-the-job learning opportunities were also a key element in developing a learning environment. The employees felt they could benefit from cross-training, attendance at meetings, and increased responsibility. Finally, they stated that growth must be supported by allowing employees to learn from mistakes and openly discuss failures without fear of repercussions.

**Implications**

Business must strike a balance between production/operations and training. It is difficult to directly measure the return on investment (ROI) for training, but it is simple to see the value of creating and selling a product. Thus, it may be tempting to prioritize product over development. However, that decision may be short sighted. Investing in employees may be costly up front, but the ROI over time may be immeasurable. Thus, companies must identify the
training and development that produce the best value for their organizations. If, for example, an organization has a high turnover rate, cross-training and succession planning may be the best use of their training resources. Additionally, if innovation is the foundation of a company’s success, it may be important to attend conferences to better understand the needs of their customers and observe industry trends.

The findings of this study and previous work indicate that companies wishing to stimulate growth in their employees must consider the influential role of a learning culture. Employees need a work environment that provides continuous learning opportunities, promotes collaboration, encourages dialogue, and empowers individuals (Marsick & Watkins, 2003).

Leader-Member Exchange

Findings

H2 investigated the relationship between leaders and subordinates, measured through LMX, and employee participation in learning activities. Although LMX is a highly researched theory, only a small body of work has tested the influence of LMX on employee participation in learning activities (Bezuijen et al., 2010; Bezuijen et al., 2009; Walumbwa et al., 2009). Therefore, the current work built on this unique research angle.

LMX theory focuses on the 1:1 relational quality of employees and their supervisors. High-quality LMX relationships are developed through social exchanges in which the dyad develops reciprocal feelings of trust and respect (Graen & Uhl-Bien, 1995; Janssen & Van Yperen, 2004). Subordinates who achieve high-quality LMX with their supervisors are more likely to have opportunities, resources, and support to engage in learning activities (Bezuijen et
Thus, higher quality LMX was expected to be positively related to employee involvement in learning events.

Analysis of the connection of LMX and employee engagement in learning activities revealed a statistically significant relationship between the two variables with a small to moderate effect size. The data indicate that the employees in this study had a generally favorable relationship with their immediate supervisors and the higher the quality of the relationship, the more likely employees were to participate in learning activities. Although it is too early to determine the direct vs. indirect role of LMX on employee engagement in learning activities, it is evident that leaders play a pivotal role in the process. Anecdotal stories from several employees in the participating company indicated the level of respect and affinity for one’s supervisor influenced employees’ motivation to participate in the IDP process. Workers who enjoyed high-quality LMX with their supervisors seemed to have more buy-in for IDP use and were more willing to generate and execute a plan of development. In low-quality LMX relationships, employees admitted to “checking the box” with the IDP. In other words, they wrote easily achievable goals or recorded development tasks already completed. Others simply ignored the requirement because there did not appear to be either a positive or negative consequence to completing the plan.

This result is consistent with the findings reported by Walumbwa et al. (2009), who found that LMX was related to voluntary learning behavior. In contrast, Bezuijen et al. (2009) were not able to show a direct link between the two variables. However, in their post hoc analysis, Bezuijen et al. (2009) found that LMX did have an indirect relationship with learning activities, showing a path from LMX to goal specificity, goal difficulty, and providing learning opportunities. Based on their results Bezuijen et al. (2009) concluded that in higher quality LMX
relationships, leaders were more likely to establish difficult and specific goals and provide increased learning opportunities that translated into more participation in learning activities. In a later study, Bezuijen et al. (2010) determined that goal specificity and difficulty played a mediating role between LMX and employee learning, building on the idea that LMX indirectly influences workers’ participation in developmental activities.

Implications

As discussed earlier, establishing a learning culture is important for stimulating workplace learning; however, the role of the leader is arguably just as essential. Leaders serve as the connecting thread between creation of a learning culture and successful use of an IDP. They write policy, govern the budget, establish priorities, and impact daily activities. Through their actions and decisions, leaders create and modify the workplace culture. During IDP conversations, leaders also advise, mentor, and provide performance feedback to promote employee learning. Additionally, leaders hold employees accountable for completion of the IDP and execution of developmental goals.

Practically, the LMX findings show employees benefitted from higher quality LMX with their supervisors. Therefore, it is incumbent on supervisors to establish social exchanges with subordinates and move through the LMX stages of stranger, acquaintance, and maturity (Graen & Uhl-Bien, 1995). High-quality LMX is likely to bolster employee commitment to IDP use and strengthen learning behaviors. High-quality LMX relationships may also induce employees to be more open about learning gaps and the need for developmental opportunities. Similarly, in high-quality LMX connections, supervisors may feel more comfortable providing candid feedback on employee performance.
H2 was supported in this study; however, the small to moderate effect size indicates that LMX is not as strong an indicator of employee participation in learning as organizational culture and IDPs. This result is not surprising, as learning cultures and IDPs are generally more directly connected to learning.

Individual Development Plans

Findings

H3 investigated the relationship between individual development plans and participation in learning activities. IDP use has grown in popularity and is used in academic and workplace settings (Hobin et al., 2014; Lejune et al., 2016). The IDP, when used as a development tool, is designed to help employees identify gaps in their competencies and consequently develop strategies to enhance their knowledge and skills. Although IDP use is on the rise, a limited number of studies on the topic exist (conducted mostly in Europe) and contained only one known survey scale. The current research contributes to the literature in three ways. It expands the small body of research on IDPs, provides a U.S. employee perspective, and offers a new survey tool to facilitate future quantitative studies.

Data gathered in the current study showed that IDPs and learning activities were positively related, and the tool was in fact an effective way to encourage employee development. This finding was further supported through post hoc regression analysis of the three supporting variables, showing the IDP to be the most significant indicator of employee engagement in learning. Like European workers, the U.S. employees in this study also responded positively to
IDP use. This finding is perhaps the most important for the current research, suggesting organizations that have invested in IDP programs are likely to benefit from their efforts. Previous survey studies of IDPs utilized the PPQ instrument (Beausaert et. al, 2011a), which included multiple facets of IDP practice (i.e., employee learning and reflection, information and feedback, and a motivating supervisor). Yet, the results of those studies were mixed when attempting to determine which of the attributes was most important for promoting learning through the IDP process. The current study utilized a researcher-developed survey tool that included the supporting constructs of communication, reflection, and goal setting. However, it is not within the scope of the current research to suggest which aspects of the IDP tool were the most effective agents for motivating employees to engage in learning activities. What is valuable to note is the researcher-developed survey instrument showed a moderate to strong correlation with learning activities. Additionally, the new survey questionnaire may be useful to other organizations wishing to analyze the use of their IDP programs.

Implications

Although studies on IDP use remain limited, the current research is encouraging for U.S. employers seeking tools to enhance workplace learning. Implementing a program of development through IDP use will allow businesses to capitalize on the talents of their existing workforce. For example, developmental conversations between employees and their supervisors may reveal untapped skills and knowledge within the workforce. Vera, who works in the Human Resources Department, may also be skilled at developing SharePoint sites. Kathryn, who works in Operations, may possess an affinity for teaching. Equally important is discovery of the employee who is eager to learn new skills and take on more responsibilities. In addition to
discovering internal talent, increasing productivity, and enhancing work quality, investing in employee learning may also have other positive consequences, such as reduced employee turnover and creation of a more positive work environment.

IDPs for this organization were the most important factor in predicting employee engagement in learning activities, yet it is difficult to separate IDP use from organizational culture and LMX. Inherently, an organization that implements use of an IDP has aspects of a positive learning culture and use of the IDP tool is likely impacted by LMX quality. The implication for organizations is IDP use should not be used in isolation from other supporting constructs that influence employee learning.

Demographics

Findings

The final area of analysis in the current study was the exploration of demographic factors and their influence on employee participation in learning activities. Specifically, the study assessed whether education level, time at organization, time with supervisor, age, and/or gender influenced the relationship among organizational culture, LMX, IDPs, and employee participation in learning activities. The correlation between employee education level and gender was not significant, so the two variables were removed from further analysis.

The remaining variables of time at organization, time with supervisor, and age showed a medium effect size for correlation with learning activities. Hierarchical regression analysis revealed time at organization, time with supervisor, and age added significant predictive variance in learning activities when controlling for organizational culture, LMX, and IDPs. The model
showed that 47% of the total variability in an employee’s participation in learning activities was explained by the predictors. However, further review of the data revealed that age was not a statistically significant predictor in the model and was removed from additional analysis.

Both remaining predictors were based on time, but they were conversely related. Results indicate that the longer an employee worked at the organization, the less likely they were to participate in learning activities. This result may have reflected the organization’s learning culture, which was present but not deeply embedded, so employees with more time at the organization may have recognized that developmental activities were not as valued as other workplace tasks. Another possibility is the more tenured employees had accomplished their career goals and were satisfied with their level of development or were nearing retirement.

In contrast to time at the organization, the time with supervisor measure showed the longer an employee worked for a supervisor, the more likely they were to engage in learning activities. Yet, the employees in the current study had a limited amount of time with their supervisors. Based on LMX theory, employee-supervisor relationships can evolve over time (Graen & Uhl-Bien, 1995). Thus, LMX may have an increased influence on employee participation in learning activities if the pair have more time to develop the relationship.

**Implications**

The two statistically significant demographic attributes for the employees in this research, time with organization and time with supervisor, paint different pictures. The time with organization data are a troubling result for a company that values employee development. The information suggests the organization might benefit from more development opportunities designed to engage employees in the middle to late stages of their careers. An additional issue
may revolve around execution of the IDP. Although the IDP was a required document, there was not a direct reward or consequence related to its completion. There were, however, incentives for meeting other workplace measures of success (e.g., securing new contracts, exceeding production quotas, etc.). If employees are to buy into workplace learning, it must be prioritized on a level equal to other daily activities.

The positive relationship between time with supervisor and engagement in learning highlights the critical part leaders play in motivating workplace learning. The finding may also point to the important role of supervisors in the IDP process. Consistent with LMX theory, more time with a supervisor provides a greater chance the dyad will develop a sense of loyalty, respect, and trust and the leader will have a more influential role in the development of the subordinate. Thus, leaders must make time for regular and meaningful developmental conversations with employees and provide the resources to support workplace learning.

Limitations

This study sought to explore constructs that stimulated employee learning by looking at variables rarely studied together. The findings suggest learning cultures, high-quality LMX relationships, and use of IDPs positively support employee participation in learning activities. However, the number of participants in the study was small. Thus, generalization to a larger population should be considered with caution. Additionally, the survey instrument used in the study was researcher developed and requires use in additional studies to confirm its reliability. A factor analysis of the IDP scale would also help to determine if the underlying variables of communication, reflection, and goal setting or other factors are present in the survey instrument.
Recommendations for Future Research

Despite the above limitations, the results of the study are encouraging for organizations that wish to promote learning. However, if workplace learning is truly valued by the company in this study, as well as other organizations, additional research may be warranted to understand if there are barriers to employee learning. For example, companies may wish to use the full 43-item Dimensions of the Learning Organization Questionnaire (Marsick & Watkins, 2003) to reveal specific areas for improvement. Focus groups and 1:1 interviews may also help to identify the strengths and weaknesses of developmental programs.

Additionally, the results of this study and the work completed by Bezuijen et al. (2010, 2009) and Walumbwa et al. (2009) suggest more research is needed to fully understand the role that LMX plays in promoting learning activities. It seems clear that leaders/supervisors are integral to employee learning, but it is unclear how that relationship manifests into developmental activities.

Although it was not specifically addressed in this research, future research is also needed to explore the relationship among the supporting constructs of organizational culture, LMX, and IDPs. Understanding these relationships may show a clearer picture of the environment and support mechanisms needed to stimulate employee learning.

Conclusions

Based on the importance of organizational learning, a large amount of scholarly research has been devoted to understanding the antecedents to learning at the individual, team, and strategic levels. This study sought to explore these antecedents by exploring the supporting
constructs related to employee engagement in learning activities. Through the study of IDPs in a U.S. organization, development of a new IDP scale, and analysis of a learning culture and LMX in relation to learning activities, this study adds to previous literature devoted to the understanding of employee participation in learning activities.

The findings support the use of IDPs as a tool to motivate employees to engage in workplace learning activities. Additionally, the results show the existence of a learning culture and high-quality LMX are also related to participation in learning activities. The interconnected nature of the three variables suggests employee participation in learning events is highest when all three supporting constructs are present. Simply stated, employees are most likely to engage in learning activities when supported by a learning culture, have high-quality LMX, and utilize an IDP.

It is essential that organizations recognize the impact of a positive learning culture and its ability to encourage employee development (Marsick & Watkins, 2003; Schein, 2010). Also, important to employee participation in learning activities is fostering exchanges that improve the relational quality (LMX) between employees and their supervisors (Bezuijen et al., 2010). Finally, implementation of an IDP will increase employees’ motivation to engage in learning activities by providing feedback, promoting reflection, and creating learning goals.
REFERENCES


APPENDIX A

POST CARD NOTIFICATION
Hello,

My name is Stacy Seaworth. After retiring from the Army in 2017, I returned home to northern Illinois to pursue a doctorate in Education at Northern Illinois University. I am in the final stage of my program of study (the dissertation), and I need your help with my research project.

**Will you give 15 minutes of your time to complete a short anonymous survey?**

The purpose of the survey is to gain information about the best ways to support employee learning and development in the workplace.

In a few days, you will receive an email asking for your participation. The email will contain a link and QR code to access the online survey. The survey can be completed via computer, tablet, or smartphone.

If you have questions about the survey or my research, I can be reached at the email below.

I know that your time is valuable, and I want to thank you in advance for supporting my research.

Stacy M. Seaworth
sseaworth@niu.edu
APPENDIX B

EMAILS TO PARTICIPANTS
First Email Distribution:

Subject Line: A Penny for Your Thoughts: Workplace Learning Project.

Hello,

My name is Stacy Seaworth. After retiring from the Army as a Lieutenant Colonel in 2017, I returned home to northern Illinois to pursue a doctorate in Education at Northern Illinois University. I am in the final stage of my program of study (the dissertation), and I need your help with my research project.

A few days ago, you may have noticed a postcard at your workstation outlining some of the details of the project. In short, I am seeking your help to gain information about the best ways to support and encourage employee learning and development in the workplace.

Will you give me 15 minutes of your time to complete a short anonymous survey?

I know that your time is important, and I appreciate your help.

To participate, please click on the “Workplace Learning Survey” link below or use the QR code to access the survey on your smartphone. The survey will close at midnight on February 14, 2020.

Workplace Learning Survey

Respectfully,

Stacy M. Seaworth
sseaworth@niu.edu
Second Email: Sent one week after first email

Subject Line: Reminder: A Penny for Your Thoughts: Workplace Learning Project.

Hello,

This is a reminder that you have approximately one week left to complete the survey on Workplace Learning. If you have already completed the survey, THANK YOU!

In case you missed the first email, below is a short message about the project.

My name is Stacy Seaworth. After retiring from the Army as a Lieutenant Colonel in 2017, I returned home to northern Illinois to pursue a doctorate in Education at Northern Illinois University. I am in the final stage of my program of study (the dissertation), and I need your help with my research project.

In short, I am seeking your help to gain information about the best ways to support employee learning and development in the workplace.

Will you give me 15 minutes of your time to complete a short anonymous survey?

I know that your time is important, and I appreciate your help.

To participate, please click on the “Workplace Learning Survey” link below or use the QR code to access the survey on your smartphone. The survey will close at midnight on February 14, 2020.

[Workplace Learning Survey]

Respectfully,

Stacy M. Seaworth
sseaworth@niu.edu
Final Email: Sent 2 days before survey closure
* Note: The final email adjusted the time need to complete the survey from 15 minutes to 5-7 minutes based on previously completed questionnaires.

Subject Line: 2 Days Left!: A Penny for Your Thoughts: Workplace Learning Project.

Hello,

Just a couple days left! It’s not too late to participate in the Workplace Learning Project survey and let your voice be heard. They survey will close at midnight on 14 February.

Thank you to those who have already participated.

I need your help to complete research for my Doctorate in Education at Northern Illinois University. The project is designed to gain information about the best ways to support employee learning and development in the workplace (often called professional development).

Will you PLEASE give 5-7 minutes of your time to complete a short anonymous survey?

I truly appreciate your help in furthering the knowledge about workplace learning. Personally, I am grateful for the assistance as I strive to complete my doctoral program and transition from the Army to the civilian sector.

To participate, please click on the “Workplace Learning Survey” link below or use the QR code to access the survey on your smartphone.

Respectfully,
Stacy M. Seaworth
LTC, U.S. Army (R)
sseaworth@niu.edu

[Workplace Learning Survey]