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Managerial Strategies to Encourage Learning from Experience

Olena Khomenko
Walden University

Walden University

College of Management and Technology

This is to certify that the doctoral study by

Olena Khomenko

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Review Committee
Dr. Franz Gottleib, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Janie Mayo, Committee Member, Doctor of Business Administration Faculty

Dr. Jaime Klein, University Reviewer, Doctor of Business Administration Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2020

Abstract

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Olena Khomenko

MBA, The University of Chicago Booth School of Business, 2008

MA, Taras Shevchenko National University, Kiev, Ukraine, 1991

Doctoral Study Submitted in Partial Fulfillment

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Abstract

In a fast-paced, volatile global economic environment, the ability to learn from successful experiences and failures is critical for the improvement of business performance. The problem is that organizational managers often fail to improve performance because they lack strategies to encourage learning from project teams' positive and negative experiences. Grounded in the conceptual framework of experiential learning, the purpose of this qualitative multiple case study was to explore managerial strategies to encourage and facilitate learning from experience in teams. The participants were 7 managers from multinational organizations in the United States, Canada, the United Kingdom, Germany, and Switzerland who had more than 5 years of experience of leading teams through successful and failed projects. Data were analyzed from semistructured interviews and company documents following Yin's 5-step process. Three themes emerged to include managers leveraging management processes, structures and systems; proactively shaping learning culture; and continuously cultivating and role-modeling learning behavior. Team managers could encourage learning in organizations by leveraging management practices, systems, and tools. Senior managers may also consider positioning learning as a company value and role-modeling learning behavior. Human resources professionals may support learning in teams by training managers to strengthen the growth mindset and coaching skills. The implications for positive social change include the potential to improve employee satisfaction, engagement, retention, sense of well-being, and efficacy.

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Dedication

To my family. To my mother, Ludmila Minina, who taught me the importance of education and supported my high school and undergraduate education through great self-sacrifice.

To my husband, Iurii Khomenko, who has been my learning companion and supportive coach in all my learning experiences for the last thirty years.

To my daughter, Dasha Khomenko, whose championing and challenging my commitment to learning has been a great inspiration in all my educational projects.

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Section 1: Foundation of the Study

Background of the Problem

Organizational success in the global knowledge economy depends on the ability to experiment, extract, and implement learning (Chadwick & Raver, 2015). But scholars of organizational behavior and entrepreneurship have concluded that successful and failing experiences have fundamentally different effects on collective learning (Byrne & Shepherd, 2015; Desai, 2016a; Fillion, Koffi, & Ekionea, 2015). Success leads to the validation of existing knowledge, incentivizes repetition of action, and brings confidence and initiative (Chen, Zhou, & Liu, 2017). In contrast, experiencing failure triggers deep reflection about managerial mental models and leads to a search for the causes of failure and a revision of thought paradigms (Desai, 2016a). One of the organizational benefits of learning from experience, especially that of failure, is the improvement in innovation and competitiveness (Khanna, Guler, & Nerkar, 2015; Weinzimmer & Esken, 2017).

Continuous learning from both positive and negative experience is essential for human capital development (Noe, Clarke, & Klein, 2014) and is critical for organizational success in the 21st century (Chadwick & Raver, 2015). A negative attitude toward failure in a business context contributes to the culture of risk aversion and leads to focusing on learning mostly from success (Wang et al., 2018). Therefore, a need exists to research how leaders can overcome the stigma of failure and encourage risk-taking and learning from experience to build organizational competitiveness and performance (Zhou, Hu, & Shi, 2015). In this study I explored strategies that encouraged learning from successful and failing experiences.

Problem Statement

In a fast-paced, volatile business environment, the ability to learn from successful experiences and failures is significant for success (Aranda, Arellano, & Davila, 2017; Chadwick & Raver, 2015). Although organizational leaders strive to replicate successes, failure is prevalent in organizational life: only half of new ventures succeed (Bureau of Labor Statistics, 2016), and almost 40% of new products (Cooper, 2019) and almost 90% of corporate venture projects fail (Cândido & Santos, 2015). The general business problem is that some organizational leaders do not improve performance within their organizations by learning from experience. The specific business problem is that some managers lack strategies to encourage and facilitate learning from project teams' experiences.

Purpose Statement

The purpose of this qualitative multiple case study was to explore strategies that managers use to encourage and facilitate learning from project teams' experience. The targeted population comprised senior managers from seven global corporations who had experience in leading both successful and failed projects. The geographical locations of these companies included the Midwestern and Western United States, Canada, the United Kingdom, and Europe. The implication for positive social change includes the potential to establish a risk-tolerant and innovative culture in organizations. This culture could support an improvement of organizational climate to build an atmosphere of trust and improved employee engagement to strengthen motivation and retention. Positive changes inside organizations could facilitate positive social change outside the organizations by

bringing more stable employment and stronger support for the development of local communities.

Nature of the Study

A qualitative method is most suitable for researching managerial strategies that promote learning in organizations. Organizational learning is a complex, socially constructed, and context-specific process (Zhou et al., 2015), which requires an interpretative research method. Researchers use a qualitative method to provide insight into people's actions as they unfold in context (Key, 2018). In contrast, a quantitative method is appropriate when the objective of a study is to measure the incidence (Park & Park, 2016), establish a causal relationship (Eriksson & Kovalainen, 2015), or measure the effects of various factors on social phenomena. The mixed method approach is a combination of quantitative and qualitative methods providing an in-depth analysis and understanding of social phenomena (Denzin & Lincoln, 2018). However, mixed methodology can be complicated and time consuming (McCusker & Gunaydin, 2015). I did not plan to test a theory or establish a relationship; consequently, I did not select the quantitative or mixed method.

The qualitative research designs applicable to my topic were phenomenology, ethnography, and case study. Phenomenological researchers focus on understanding the meanings of participants' lived experiences related to a phenomenon that is unique in frequency or scope (Khan, 2014). I did not select a phenomenological design, as the focus of my study was the events that were common in business organizations. Because ethnographers use long-term immersion in daily life of a group in its natural setting

(Atkinson, 2018) and I planned to study managerial strategies and not group cultures, I also did not select ethnography. Finally, a case study is a recommended design for researching complex social phenomena inseparable from their context, with a focus on the process rather than the result of the studied activities (Dasgupta, 2015). The case study design is suitable for exploring a real-life, time-bound system via data collected from a small sample (Cronin, 2014). Therefore, I selected the case study design as the appropriate design for researching managerial strategies for learning from project teams' experience.

Research Question

The research question of this study was as follows: What strategies do managers use to encourage and facilitate learning from project teams' experience?

Interview Questions

1. What strategies did you use to encourage and facilitate your team's learning from business project experiences?
2. What strategies did you find worked best to encourage your team to learn from project teams' experiences?
3. What strategies did you use to encourage learning from the projects that succeeded?
4. What additional elements, if any, did you include in your strategies to encourage learning from the projects that failed?

5. Based upon your experiences across projects, what were the critical elements of your strategies to encourage learning from experience in your project teams?
6. What external support networks, if any, did you use for your strategies to encourage and facilitate learning from project experiences?
7. What additional information would you like to share about strategies to encourage and facilitate learning from previous projects' experiences?

Conceptual Framework

I used the contemporary framework of experiential learning proposed by Matsuo (2015) that includes antecedents and critical factors of productive experiential learning. According to Matsuo, the first antecedent is learning goal orientation and the second is developmental networks. These antecedents influence employees' search for challenging experiences, critical reflection, and workplace enjoyment, which are the important facilitators of experiential learning (Matsuo, 2015).

By adding the antecedents and the critical factors, Matsuo (2015) expanded the classical model of four stages of experiential learning (concrete experience, reflective observation, abstract conceptualization, and active experience) to include metacognitive and sociocultural drivers that facilitate ongoing and relevant knowledge creation in organizations. I used Matsuo's comprehensive model of experiential learning as a lens to explore the strategies employed by managers to encourage and facilitate their teams' learning from experience on the job.

Operational Definitions

Double-loop learning: Double-loop learning is a process through which an individual or entity questions the values, assumptions, and policies, which results in their review and modification (Jain & Moreno, 2015; Williams & Brown, 2018).

Goal orientation: Goal orientation is a description of the nature of motivation and the reaction of individuals and groups in an achievement context (Chadwick & Raver, 2015).

Mental frame: Mental frame is an individual or organizational worldview, implicit or explicit, that provides context to interpret new information, defines relevant knowledge, and directs action (Heslin & Keating, 2016; Santa, 2015).

Organizational learning: Organizational learning is the process of sharing individual learning at the organizational level, leading to a change in organizational performance (Chadwick & Raver, 2015).

Resilience: Resilience describes the ability of individuals and organizations to respond productively to a significant disruption in the expected pattern of events (Rodríguez-Sánchez, Shankar Sankaran, & Vera Perea, 2015).

Single-loop learning: Single-loop learning is a process by which an individual or entity modifies his or her action according to a difference between expectations and outcomes (Jain & Moreno, 2015).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are beliefs and principles taken as true without concrete proof (Ellis & Levy, 2009). Explicit discussion of the assumptions supports the logic and integrity of the research (Marshall & Rossman, 2016). According to the experiential learning theory, which served as a conceptual framework of this study, learning is a complex, socially constructed phenomenon that happens simultaneously at an individual, group, and organizational level. The first assumption was that senior managers deliberately designed strategies to promote organizational learning by addressing corporate culture, team context, and employees' motivation and ability to learn. The second assumption was that managers could differentiate the specific process and the value of conceptual and experiential learning. The final assumption was that the participants would give truthful accounts, share relevant documents, and accurately represent the managerial strategies and their subordinates' learning experiences.

Limitations

Limitations are risks to study validity that researchers cannot control (Ellis & Levy, 2009). Every empirical study has weaknesses, and reporting such flaws adds credibility to the study and places it into a context of existing research (Davison, 2017; Greener, 2018; Schilke, Hu, & Helfat, 2018). Most limitations result from the method of a study and other research design choices, so researchers should identify them, explain their importance for the study validity, and describe measures to manage their impact (Greener, 2018; Schilke et al., 2018). The limitations of this study followed the choice of

research paradigm and selected research design. The participants were managers of multinational organizations, and any generalization of the results beyond this population should be carried out with caution. The unit of analysis was a manager of a team with a limited number of participants. Subsequently, the generalization or transferability of this study's findings to the broad managerial population would not be appropriate, and the only justified type of generalization of the case study results will be analytical.

Delimitations

Delimitations establish the boundaries of the study through a description of the factors and concepts the researcher left out of the scope (Ellis & Levy, 2009). The focus of this study was management strategies to encourage learning from experience in teams in a multinational corporation. Corporate and organization-wide strategies and policies were out of the scope of this study. As the focus of this study was multinational corporations, other types of organizations were also outside of the scope. As defined by the research problem, the focus was on learning from experience, which excluded executive education and corporate training programs.

Significance of the Study

Contribution to Business Practice

Learning from experience is important for organizational success (Savelsbergh, Havermans, & Storm, 2016), because it facilitates team collaboration (Weinzimmer & Esken, 2017), innovation (Noe et al., 2014), and better organizational performance (Jain & Moreno, 2015; Zhou et al., 2015). This study resulted in recommendations that might lead to a more risk-tolerant culture that could help to improve project management,

product development, market competitiveness, and organizational agility. In this study, I explored the strategies managers used to encourage and facilitate learning from project teams' experience. Managers may be able to use the findings to overcome psychological, social, and organizational barriers to organizational performance. Managers may encourage learning in their teams by improving team motivation, offering personal coaching, and seeking more team feedback and communication. These managerial behaviors could lead to facilitating process improvement, developing and testing new ideas, and implementing other managerial practices that can benefit from teams learning from experience and can lead to improved business performance.

Implications for Social Change

Learning organizations create conditions for employees' personal fulfillment, improved motivation, and retention (Pantouvakis & Bouranta, 2013). The implication for positive social change includes the creation of a risk-tolerant and innovative culture in organizations. This type of culture can support a climate of psychological safety and trust with conditions that support employees' development, improved engagement, motivation, and retention. Higher on-the-job engagement leads to higher life satisfaction (Karatepe & Talebzadeh, 2016). Employees with higher levels of engagement and motivation report a greater sense of happiness, more job satisfaction, and better quality of life (Mache, Vitzthum, Klapp, & Danzer, 2014); their health and overall sense of well-being also improve (Moynihan, DeLeire, & Enami, 2013). These positive changes may also increase feelings of life satisfaction outside of work (Choi & Lee, 2014), which positively affects communities via improved community services (Supanti, Butcher, & Fredline, 2015).

A Review of the Professional and Academic Literature

The purpose of this study was to explore managerial strategies to encourage and facilitate learning from experience in teams. In this review I discuss literature related to my study to position it within the current debate about the importance of learning in organizations, the benefits of learning from experience (i.e., failure), and practical managerial strategies to encourage learning from both successful and failing experiences.

The first section of this review covers the classical theory of experiential learning and the scholarly works that further develop this theory and its application to organizations. The following sections include a review of the theories of organizational learning, the learning organization, mind-sets and mental frameworks, explorative and exploitative learning, and organizational resilience that support the experiential learning theory and its application to the business setting. An additional section contains an overview of contrasting theories. The review concludes with a discussion of empirical studies on the value of learning from experience for business performance and of managerial strategies that support such learning**.**

I located literature using the following keyword search terms: *adult learning theories*, *learning from experience*, *learning in teams*, *learning organizations*, *organizational failure,* and *organizational learning.* The initial search started with the Walden University Library and Google Scholar and continued using the academic databases such as ProQuest, EBSCOhost, and Sage Journals. In addition to online databases, I used Toronto Public Library and Google Books to access seminal works on experiential learning and supporting theories. In this section, I have reviewed more than

297 sources, which were primarily scholarly articles. This review includes 128 sources, 124 (98%) are scholarly articles, of which 114 (88%) have publication dates between 2015 and 2018.

Experiential Learning Theory

Kolb formulated the experiential learning theory in 1984 based on the philosophy of pragmatism, social psychology, and adult developmental theory (Kolb, Boyatzis, & Mainemelis, 2000). Kolb (2015) established learning as the major process of creating knowledge through a transformation of experience. As an ultimate adaptation process, learning includes decision making, problem-solving, and other, more specialized adaptive processes (Kolb, 2015). The main propositions of Kolb's experiential learning theory (KELT) are that (a) learning is not a set of outcomes, but the process of forming and transforming ideas through experience; (b) learning is continuous and inseparable from experience; and (c) learning involves a dialectic relationship between the opposing modes of experiencing reality and adapting to it. Responding to critiques, Kolb later clarified that (d) adaptation through learning is holistic and involves cognition, emotions, and physical experience of outcomes, and (e) learning requires constant engagement and exchange between an individual and the environment.

Major contributions of the original KELT were the description of the learning cycle and the formulation and measurement of learning styles. As learning styles are not relevant for this study, I focused on the learning cycle, which includes a dialectic relationship between the two types of realities and two types of reality transformation. In every experience, an individual faces concrete and abstract forms of reality and engages

in reflective observation or active experimentation, as the two modes of experience transformation (Tomkins & Ulus, 2015). The learning cycle becomes a process of resolving dialectic tensions between action and reflection and between experience and abstraction (Kolb, 2015). Kolb summarized this dialectic interaction into four stages of the learning cycle: (a) concrete experience, (b) reflective observation, (c) abstract conceptualization, and (c) active experimentation. Therefore, learning is happening constantly, at every stage of life and in every social setting; concrete experience becomes a basis for observation and reflection, and reflection creates abstract concepts that motivate actions. Finally, experimenting with new actions gives rise to a new experience (Kolb, 2015).

Researchers of individual and collective processes of learning outside education have tested KELT's application to managers, teams, and organizations and confirmed that the stages of the learning cycle are present and meaningful in an organizational setting (McCauley & McCall, 2014; Owen, Brooks, Curnin, & Bearman, 2018). Moreover, the ability to create knowledge from managers' experience might be an important distinguishing characteristic of those managers (Matsuo, 2015). At the same time, researchers and practitioners have presented several critical comments to the original theory, which Kolb (2015) addressed in subsequent research.

The focus of the first critique was KELT's bias toward the importance of individual experience and individual reflection, and the theory's disregard for the social aspects of real life (Lundgren et al., 2017). People operate in social settings, and the social environment constantly influences and shapes their experiences. In later research,

Kolb (2015) addressed the critique by highlighting the need to extend the understanding of the dialectic character of experiential learning to the interaction between individual and social processes, and between autonomy and integration.

The second critique of the KELT was that it included an oversimplified view of the learning process. Some interpretations of Kolb's learning cycle reduced it to the sequence of basic steps. However, the real learning process is not as structured and is dependent on the unique characteristics of individuals and their learning environment (Schenck & Cruickshank, 2014). Critics pointed to the lack of consideration of metacognitive factors such as a higher order thinking about thinking (Matsuo, 2015). But Kolb (2015) agreed that metacognition had an executive role in self-regulation and deliberate learning processes and clarified that learning, as an ultimate adaptive process, includes self-reflection and self-control.

Application of KELT to organizational context. Applying KELT to the business organization context, Matsuo (2015) proposed a framework for understanding factors that shaped and facilitated experiential learning as a tool for organizational development. Matsuo broadened Kolb's original theory by including factors that would precede and facilitate the experiential learning of managers in the work context. With this framework, Matsuo addressed the critique of KELT and positioned it for applicability in the workplace context.

***Facilitators of experiential learning at work*.** By including the three following factors as facilitators of experiential learning at work, Matsuo (2015) further addressed the critiques of KELT. The resulting suggestion from Matsuo was that seeking

challenging tasks, critical reflection, and enjoyment of work facilitated conditions for employees to learn from work experiences. These three elements may serve as guidance for the practical steps that managers can take to encourage their employees to learn from experience.

Seeking challenging tasks. Experience is the starting point and the main material for learning (Kolb, 2015). However, not every job experience brings relevant learning to a business. To facilitate the necessary competencies and skills, the experience should relate to business, have meaning for the employee (Matsuo, 2015), and be salient enough to enable transformation into learning. Seeking challenging tasks is close to the concrete experience and active experimentation stages of the Kolb's learning cycle (Matsuo, 2015). Creating learning experiences is a popular tool for management development. One of its applications is expatriate assignments, which often involve higher responsibilities, developing a new course of action, coping with employee issues, or solving inherited problems (Day & Dragoni, 2015). To create meaningful and relevant learning from on-the-job experience, people need to seek challenging tasks actively (Matsuo, 2015). Managers can use other types of challenging experiences to create learning opportunities for their subordinates.

Critical reflection. Recognizing the influence of social context and the role of power, influence, and control issues underlying organizations, Matsuo (2015) added critical reflection as a second facilitator of experiential learning at work and highlighted the difference between reflection about the meaning of experience and critical reflection that challenges presupposed beliefs. Critical reflection includes a reexamination of

existing assumptions, established practices, and ingrained cultural norms. As employees transform their work-related experiences into new knowledge, there is a need to reassess the impact of established assumptions, attitudes, and actions of other people and the work environment (Cunliffe, 2016; Owen et al., 2018; Schippers, Edmondson, & West, 2014). Reflective practices create conditions for managers and employees to slow down and to adopt an attitude of inquiry (Matsuo, 2015), which is especially important when acting in an unfamiliar or unpredictable environment or performing novel tasks and leads to the discovery of innovative solutions or work methods.

Other scholars of organizational learning have proposed similar concepts. The concepts of single- and double-loop learning are examples of critical reflection in organizational contexts (McClory, Read, & Labib, 2017; Owen et al., 2018; Santos, Uitdewilligen, & Passos, 2015). Additionally, uncovering mental models that limit performance is an important principle of the learning organization approach developed by Senge (Fillion et al., 2015). Scholars and practitioners have advocated that critically reviewing organizational mental models and replacing them with new ones via the double-loop learning mode was necessary for effective learning in teams (Jaaron & Backhouse, 2016). It is important for managers to remember to periodically review their mental models and encourage critical reflection in teams.

Enjoyment of work. The third facilitator of experiential learning in organizations is the enjoyment of work (Matsuo, 2015). Matsuo suggested this facilitator by building upon the studies of positive psychology and the theory of flow, developed by Seligman and Csikszentmihalyi, respectively. Enjoyment of work is necessary to maintain

motivation for challenging tasks and for engagement in deep critical reflection (van den Hout, Davis, & Weggeman, 2018). This state often exists when a task both presents a high level of challenge and requires a high level of skills, which is what Csikszentmihalyi called flow (Frino & Desiderio, 2018; Tse, Fung, Nakamura, & Csikszentmihalyi, 2016).

Facing a challenging task and performing to the edge of their abilities stretches employees' capabilities and creates a possibility to learn something new and build a sense of self-efficacy. Such a combination may produce feelings of enjoyment that boost motivation. Enjoyment of work supports active experimentation and reflection and positively relates to performance and career (Matsuo, 2015). Experience of flow can happen at the collective level when teams perform at the peak of their capabilities and report a higher level of enjoyment compared to an individual's experience of flow (Aube, Rousseau, & Brunelle, 2018). Knowing factors that facilitate such experiences can help managers to create better conditions for experiential learning.

Antecedents of experiential learning at work. In addition to the individual attitudes and behaviors that facilitate learning from experience at work, Matsuo (2015) considered external conditions that promoted those behaviors. These antecedent conditions are learning goals and developmental networks. The antecedents work in combination with the facilitating behaviors to shape a social environment that motivates and supports learning from experience in organizations (Matsuo, 2015). By influencing those antecedent conditions, managers shape the environment for their teams to encourage and facilitate learning from experience.

Learning goals. Goals orientation refers to a mind-set that guides behavior in situations that challenge abilities or involve competition (Heslin & Keating, 2016). Two types of goals orientation are performance goals orientation and learning goals orientation (LGO; Heslin & Keating, 2016). Performance goals orientation refers to a mind-set that includes a focus on proving abilities, characterized by risk aversion and a limited learning curve (Heslin & Keating, 2016). Learning goals orientation refers to an orientation to persist through the challenge, seek developmental feedback, and sustain effort to perform in an unfamiliar or uncertain situation (Matsuo, 2015). In application to a business setting, a strong performance goals orientation leads to choosing tasks and activities that provide an opportunity to demonstrate existing abilities with a focus on delivering a performance outcome and avoiding risk (Porter, Franklin, Swider, & Yu, 2016). In contrast, a strong LGO motivates a preference for tasks that lead to acquiring new knowledge, mastering new skills, and learning from experience (Porter et al., 2016). Researchers have confirmed a positive relationship between LGO and performance outcomes in leaders and teams (Harvey, Johnson, Roloff, & Edmondson, 2019; Heslin & Keating, 2016; Hezlett, 2016).

Managers can influence team performance by setting objectives, providing resources, and shaping team culture by role modeling attitudes and behaviors. Managers' LGO has a positive effect on teams' task commitment and performance (Porter et al., 2016). Learning-oriented leaders help their teams succeed in performance-oriented environments (Heslin & Keating, 2016; Porter et al., 2016). Led by managers with a

strong LGO, teams become learning-goals oriented, pursue more ideas, and engage in more experimentation (Harvey et al., 2019; Porter et al., 2016).

As LGO has a greater impact in situations with a high level of challenge and high personal importance of tasks (Heslin & Keating, 2016), this orientation is fundamental for promoting a search for challenging tasks, which is a key facilitating behavior of experiential learning (Matsuo, 2015). Additionally, because LGO predicts behavior that is more positive after setbacks and overall higher intrinsic motivation, this trait can support persisting at all four stages of the experiential learning cycle. Therefore, Matsuo (2015) included LGO as one of the two antecedent conditions for experiential learning at work.

Developmental networks. The second antecedent condition for experiential learning is developmental networks, defined as person-centric and context-relevant parts of social systems that serve employee learning and development (Matsuo, 2015). Developmental networks consist of external and internal supporters that take active interest and action toward advancing their protégé's learning and growth (Harvey, Moeller, & McPhail, 2017; Yip & Kram, 2016). Matsuo (2015) defined developmental networks as consisting of different types of relationships: individual mentors and mentoring circles, intraorganizational networks, and discussion groups. In addition to these, coaches and career sponsors are valuable members of a manager's networks of development (Harvey et al., 2017; Opengart & Bierema, 2015). Participation of direct supervisors in the employees' developmental networks is essential, especially at the early career stages (Dunn, 2017; Harvey et al., 2017).

Mentoring is one of the most widely used types of developmental networks. Mentoring is a relationship between a more experienced and a less experienced professional in which the former gives guidance and support, shares knowledge, and provides a focus on the development and career progression of the latter (Harvey et al., 2017; Opengart & Bierema, 2015). An effective mentoring relationship depends on the commonality of background, personality, aspirations, and competencies of mentors and their protégés; requires mutual openness and consistent and regular interactions over time; and includes professional and career development (Harvey et al., 2017; Opengart & Bierema, 2015). To achieve developmental objectives, mentors share technical skills, offer collaboration, and provide access to broader social networks that are important for their profession (Dunn, 2017); support and guide mentees through work-related challenges; and often provide opportunities for challenging assignments and exposure to higher management (Opengart & Bierema, 2015). Researchers have demonstrated that mentoring can increase professional development, encourage learning (Dunn, 2017; Harvey et al., 2017), and build confidence, thereby leading to improved performance, higher job satisfaction (Opengart & Bierema, 2015), and positive career outcomes (Dunn, 2017). Mentoring and communities of practice are examples of developmental networks that support taking challenging tasks, encourage critical reflection, and contribute to the enjoyment of work through providing psychological support (Matsuo, 2015).

The comprehensive framework that facilitates experiential learning at work proposed by Matsuo (2015) builds on the concept of the learning cycle and addresses the most common critical comments. This framework incorporates findings from various

social science disciplines, such as adult learning theory, management decision-making and learning, and positive psychology. In the following sections, I briefly discuss related theories and contrasting theories.

Related Theories

Organizational learning has been at the center of attention in economics, management science, sociology, and many other disciplines (Jain & Moreno, 2015). One of the most widely accepted definitions of organizational learning is the process of changing organizational behavior as a result of experience (Chadwick & Raver, 2015). The practitioners' interest in organizational learning and its elements, dimensions, and supporting factors stems from the increasing importance of adaptation to the volatile, uncertain, changing, and ambiguous external environment in business organizations in many industries (Antonacopoulou & Bento, 2018; Zhou et al., 2015). Theoretical and empirical research from many fields demonstrated a positive relationship between organizational learning and successful organizational performance (Aranda et al., 2017; Chadwick & Raver, 2015; Jain & Moreno, 2015; Migdadi, 2019). The organizational ability to learn could become a source of competitive advantage by turning widely available resources into unique, firm-specific knowledge, skills, and capabilities (Zhou et al., 2015).

Scholars of organizational development have sought to adapt general theories of adult learning to the social context of organizations. Organizational context influences the need for people to negotiate individual differences in learning, balance social power, and agree on a shared perspective on organizational activities and its results (Van de Ven,

Bechara, & Sun, 2017). After defining learning as knowledge gained as a result of practical experience, March suggested a view on the learning cycle as the sequence of action, assessment of its outcomes, and subsequent adaptation to achieve improved results (Watkins & Kim, 2018). In an application to the organizational context, Göhlich (2016) adapted this cycle to present learning as an action to address the perceived gap between expectations and reality.

Explorative and exploitative learning. March defined learning as a process of improving organizational actions in response to environmental challenges, and March's main contribution was formulating the difference between exploitative and explorative learning (Chadwick & Raver, 2015; Watkins & Kim, 2018). These two types of learning describe varying approaches to adaptation to experience, exploration of new learning and exploitation of the existing one, create a dynamic tension at the individual, group, and organizational levels of learning and add complexity to the process of learning in organizations (Chadwick & Raver, 2015; Kauppila, 2018; Kusumastuti, 2018). While moving through collective experiences, organizational members often disagree about the assessment of outcomes of actions and experience power asymmetry, which complicates learning (Van de Ven et al., 2017). Triggered by success, exploitative learning leads to the validation of existing knowledge, incentivizes the repetition of action, and brings confidence and initiative (Chen et al., 2017; Kusumastuti, 2018). In contrast, explorative learning results in questioning the existing paradigms of thinking and accepted practices, motivates a broader search for potential explanations, and leads to more creativity, innovation, and adaptation (Danneels & Vestal, 2018; Hsu, 2015).

Difficulties in negotiating the dynamic tension between the explorative and exploitative modes of learning often lead to organizational bias toward exploitative learning that may limit innovation and create a culture that rewards success and punishes failure (Weinzimmer & Esken, 2017). Different organizational contexts may require organizations to prioritize either exploitative or explorative learning practices (Chadwick & Raver, 2015; Owen et al., 2018). The concept of exploitative versus explorative learning provides background to the discussion of differences between learning from failures and successful experiences.

Another significant contribution of March was the suggestion of a multilevel structure of learning that distinguished individual, group, and organizational levels (Chadwick & Raver, 2015; Khanna et al., 2015). Based on this multilevel approach, the 4I framework of learning represents the learning cycle as starting with intuiting and interpreting new knowledge at the individual level, followed by integrating it into group learning, and institutionalizing the recently acquired knowledge in organizational practices (Chadwick & Raver, 2015; Jain & Moreno, 2015).

Single and double-loop learning. Building on the differences of explorative and exploitative learning, Argyris further conceptualized organizational learning by introducing differences between single and double-loop learning. Single-loop learning occurs when people spot mistakes and correct them quickly without reviewing the underlying assumptions (Matthies & Coners, 2018; McClory et al., 2017; Simonin, 2017a). In contrast, double-loop learning requires first a review and change of governing values that, in turn, will lead to a change of action to improve results (Jain & Moreno,

2015; Owen et al., 2018; Simonin, 2017b). Fillion et al. (2015) viewed exploitative learning as an adaptive and single-loop learning initiated by a reaction to outside stimuli. In turn, the double-loop or explorative learning is a result of a thorough examination of experience from multiple perspectives based on an internal generative discussion. noted that Promotion of the double-loop learning requires specific management strategies and capabilities (Williams & Brown, 2018), that become the subject of this study.

Learning organization. The concepts of mental models and the importance of various approaches to their revision received further development in the works of the researchers of learning organization**.** Organizational learning is the process of developing the dynamic abilities for learning in individuals, teams, and organizations (Farrukh & Waheed, 2015). Building on the multilevel model of organizational learning, Senge saw a learning organization as a system that supported learning on four levels: individual (personal mastery), group (self-managed learning teams), organizational (shared vision and learning culture), and interorganizational (system thinking; Jain & Moreno, 2015). Personal mastery, team learning, creating a shared vision, managing mental models, and system thinking were the five disciplines central to the concept of learning organizations and applied to all four levels of learning (Göhlich, 2016).

Personal mastery, which serves as a basis for the individual learning, includes the ability to stay curious, open-minded, and focused on personal development. Managing mental models constitutes the basis of managerial work at the team level and is necessary to uncover, question, and revisit existing views on the world and theories of action (McClory et al., 2017; Rupčić, 2018). Such a review and revision of the individual and

collective mental models may lead to the creation of a shared vision, which is another discipline of the learning organization necessary to guide and direct the collective action of learning and creating (Fillion et al., 2015). The existence of shared vision is necessary to produce generative learning, which is the type of learning that leads to an exploration of the existing worldview from multiple perspectives and results in the creation of a new paradigm more aligned with the desired direction of action (Fillion et al., 2015). Team learning, as a learning organization discipline, supports the ability to create and develop a new type of intelligence, team intelligence, and thereby enables the individual members to see beyond their personal worldviews and beliefs and create a shared team vision and sense of direction (Santa, 2015). The team learning discipline stems from the ability to view problems constructively, be conscious of team roles, and generate a concerted collective action. Thus, team learning is a practical application of the fifth discipline of the learning organization: systems thinking. System thinking facilitates seeing the whole beyond the parts and directing collective thought and action to create outcomes that benefit the whole system, not only its separate elements (Arnold & Wade, 2015). The theory of learning organizations has broad applications in business and social development. Two of the five disciplines, managing mental models and team learning, have a direct connection to this study, which includes a focus on the practice of encouraging and facilitating learning from experience in organizations.

Despite its contribution to the developing practice of organizational learning, Senge's model of the learning organization was a subject of critique. Fillion et al. (2015) highlighted the overly prescriptive character of the learning organization model and

pointed at the fact that, at the time, there were no confirmed examples of organizations that implemented all five disciplines across their levels. Lack of consideration of the issues of organizational power and leadership practices was another challenge to the learning organization theory (Pedler & Burgoyne, 2017; Santa, 2015). To support practical implementation of the learning organization model, Fillion et al. suggested including (a) knowledge generation and (b) sharing and shaping organizational behaviors as two additional disciplines. Knowledge generation required infrastructure, systems, and culture that resulted from leadership actions to motivate and lead the revision of prevailing thinking and to shape organizational behavior in the process of learning (Fillion et al., 2015). Santa (2015) also viewed leadership competencies and behaviors as critically important for the practical implementation of the learning organization culture, thereby underscoring the importance of midlevel and frontline leaders, as opposed to Senge's focus on top executives. Pedler and Burgoyne (2017) noted the lack of practical prescriptions for team managers and the absence of tools to assess and track progress and suggested a threefold solution for practitioners that addressed individual, team, and organizational levels of learning. At the individual level, processes for blameless reporting and inviting opposing views created a supportive learning environment (Pedler & Burgoyne, 2017). At the team level, recommendations included initiating a dialogue to share and interpret new and disconfirming information and to identify problems and opportunities, therefore introducing processes that invited experimentation and supported risk-free team collaboration and communication (Chadwick & Raver, 2015; Nagayoshi & Nakamura, 2017; Pedler & Burgoyne, 2017). At the organizational level, leaders had to

demonstrate an openness to questioning preexisting approaches and had to allow questioning and experimenting with alternative solutions (Pedler & Burgoyne, 2017).

Addressing leadership competencies, Fillion et al. (2015) highlighted emotional intelligence, understanding power dynamics, effective communication, and building trust and a risk-tolerant culture in teams. Marsik and Watkins introduced seven dimensions of a learning organization and constructed the Dimensions of the Learning Organization Questionnaire to assess the development of such dimensions and to measure the impact of the learning organization on business performance (Watkins & Kim, 2018). These efforts helped operationalize the specific dimensions of learning organization offering a more structured perspective on potential strategies managers could implement to enable learning in their teams.

Learning from failure. Experience is the basis and the focus of organizational learning (Singh & Guha, 2018). Although most of the empirical research on organizational learning includes a focus on the process of extracting lessons from experience in general, more recent studies include a focus on the difference of learning from various types of experience. Sitkin (1992) noted that organizational learning served to promote adaptation to the environment (reliability and effectiveness) and encourage adaptability (resilience). The former most often derives from success, and the latter from failure (Sitkin, 1992; Migdadi, 2019). Other scholars built upon the behavioral theory of the firm that indicates that managers direct their attention based on their assessment of performance versus aspirations, defining performance above aspirations as success and calling performance below aspirations a failure (Desai, 2016a, 2016b). Weinzimmer and

Esken (2017) defined failure as a deviation from expected or desired results, including both avoidable failures and avoidable outcomes of risk-taking. Dahlin, Chuang, and Roulet (2018) outlined the difference between errors (incorrect execution of processes) and failures (undesired outcomes). Highlighting that sometimes erroneous processes may lead to positive outcomes while correct processes may still result in faulty outcomes, Dahlin et al. proposed to consider processes and outcomes separately and stated that errors and failures may involve diverse factors and causes: human, procedural, or structural.

Any type of failure creates a destabilizing impact on organizational routines, which increases attention and awareness and triggers the switching off of automatic scripts and the switching on of conscious processing (Mueller & Shepherd, 2016). The experience of failure facilitates double-loop learning, produces a variety of thoughts, and positively affects long-term performance (Mueller & Shepherd, 2016; Sitkin, 1992). Although failure produces negative consequences for a business, such as delays, wasted resources, lost opportunities, or reputational damage, learning from failures positively affects organizational performance (Wang et al., 2019; Weinzimmer & Esken, 2017). However, researchers have confirmed that organizational leaders preferred to learn from success and demonstrate bias against failure (Harvey, Bresman, & Edmondson, 2018; Khanna et al., 2015; Sitkin, 1992).

Difference between learning from success and learning from failure. To learn from errors, people in organizations engage in deliberate and focused activity to reflect upon mistakes, understand their causes, and develop new and more useful understanding,

competencies, and skills to apply in the future (Catino & Patriotta, 2013; Rauter, Weiss, & Hoegl, 2018). McMillan and Overall (2017) highlighted two necessary conditions for effective learning from experience: the motivation to change knowledge and the ability to extract meaningful learning from experience. Experiencing failure often creates both, as it triggers a problematic search, indicates gaps in current worldviews and competencies, and instills a sense of urgency (Desai, 2016a; Sitkin, 1992; Weinzimmer & Esken, 2017). Success confirms the adequacy of existing knowledge and discourages nonlocal searches for additional data, which might lead to premature adoption of suboptimal beliefs and simplified decision-making (McMillan & Overall, 2017; Weinzimmer & Esken, 2017).

Success and failure also produce a different impact on organizational performance. Sitkin (1992) highlighted that the effect of success can be short term, as it brings confidence, stability, and efficiency in performance. Singh and Guha (2018) added that the experience of success results in a stronger reliance on previous knowledge and reinforces exploitative learning. The effects of failure, in turn, can be more long term, as failure improves adaptability of an organization by sending a signal of inadequate performance (Sitkin, 1992; Rauter et al., 2018), thereby creating an intellectual challenge and a stronger incentive for innovation and experimentation (Chen et al., 2017). Sitkin described the liability of success as the fact that success often resulted in complacency, limited attention and search, produced risk aversion, and contributed to managerial overconfidence, which reduces learning. Desai (2016b) suggested that limiting effects of success on a nonlocal search and explorative learning were harmful for organizational

survival, especially at the early stages of enterprise development and under the conditions of a disruptive change in the industry.

Because organizational leaders and managers continue to prefer learning from success, they lose the benefits of learning from failure that motivates experimentation and improves the adaptability of organizations (Desai, 2016a; Frese & Keith, 2015). In addition, compared to learning from experiences of success, learning from experiences of failure, especially significant experiences, produces more effective learning that depreciates more slowly (Nagayoshi & Nakamura, 2017). Such learning mediates the relationship between the culture of trust and safety in teams and improves decision-making and performance (Edmondson, 2019).

Essential elements of organizational learning from failure. Interaction between cognitive, affective, and cultural factors is central to understanding how people in organizations learn from failure (Catino & Patriotta, 2013; Wang, Yang, Wang, Chen & Wang, 2019). One of the gaps in understanding the process of organizational learning from failure is due to the lack of appreciation of the powerful emotional processes that run in parallel with intensive cognitive processing (Rauter et al., 2018). As failure happens in organizations, powerful social influences shape people's emotions and cognition in the process of sharing, interpreting, and learning from the experience.

Many researchers have highlighted that emotions arising from experiences of failure had a strong effect and could block the ability to learn from them (Byrne & Shepherd, 2015; Dias & Teixeira, 2017; Edmondson, Higgins, Singer, & Weiner, 2016; Rauter et al., 2018). Emotions are brief and intense psychological and visceral

experiences resulting from the cognitive appraisal of events, actions, and their consequences (Catino & Patriotta, 2013; Rauter et al., 2018). Work-related interactions produce emotions in many organizational contexts. Intensity, valence, and timing are the characteristics of emotions that have relevance for learning from experience. In individual learning, emotions reflect individuals' instinctual and biological motives (Catino & Patriotta, 2013). People learn emotions in social environments, these emotions depend on shared mental models of an organization, which is especially important regarding the timing of emotions. Presence or absence of anxiety, shame, and so forth both before and after action depend on organizational culture, values, role expectations, and presence of trust (Wang et al., 2019). Negative or positive emotions (valence) affect learning. Emotions can restrict cognitive ability because they moderate organizational sensemaking via attribution (i.e., affecting how people explain the actions of others and themselves; Amankwah-Amoah, Boso, & Antwi-Agyei, 2016). Catino and Patriotta (2013) noted that negative emotions were more salient and lead to more mindful processing, influenced by the intensity of those emotions. Although low to moderate negative emotions support situational awareness, intense emotions, both positive and negative, promote learning and internalizing lessons from experience. Researchers agree that emotions interfere with the cognitive processes necessary for learning from failure and can either support or block them (Byrne & Shepherd, 2015; Catino & Patriotta, 2013; Rauter et al., 2018; Wang et al., 2019).

When studying the role of emotions and coping in entrepreneurs learning from failure, researchers described two types of coping involved in surviving business failure:

affective (emotion-focused) and cognitive (problem-focused) (Byrne & Shepherd, 2015; Rauter et al., 2018). Emotion-focused coping is suitable for coping with negative emotions after failure, whereas problem-focused coping is useful in dealing with practical problems resulting from failure (financial, legal, and reputational), which contributes to self-reflection and cognition. Intense negative emotions motivate sensemaking of the failure experience and eventually fade creating space for positive emotions. When they follow diminishing negative emotions, strong positive emotions help complete emotion-based coping and provide access to the cognitive resources needed for learning from failure (Byrne & Shepherd, 2015). Although usually not welcome in a work environment, both positive and negative emotions are necessary for learning from failure, as they prompt adaptive responses and facilitate sensemaking.

Cognitive processes involve modifying an existing understanding of experiences, which is a process necessary for adapting actions to the environment (Catino & Patriotta, 2013; Harmon, Green, & Goodnight, 2015; Wang et al., 2019). The learning process involves scanning the environment, interpreting the experience to assign meaning, and applying such meaning to evaluate results and plan future actions; as such, learning is a cognitive, sensemaking process (Pokharel & Choi, 2015). Researchers noted that, as learning depended on the interpretation of reality, failures played an important role in connecting sensemaking and learning: in situations of failure, people and organizations faced conditions that differed from their existing worldview, so learning from failure produced adaptive patterns of thinking (Catino & Patriotta, 2013; Rauter et al., 2018). Byrne and Shepherd (2015) confirmed that learning from failure was a sensemaking

process that required sophisticated thinking approaches such as analogical thinking, metacognition, and complex thinking.

Analogical thinking involves redeploying the knowledge and skill acquired in similar situations in the past by using and reinforcing learning from experience (Byrne & Shepherd, 2015). Metacognition, or thinking about thinking, is critical for high-order learning (Byrne & Shepherd, 2015). Metacognition refers to awareness, control, and conscious processing of thoughts and ideas and leads to adapting the thoughts and ideas to changes in situation. To learn effectively from failure, people in organizations need to develop cognitive complexity by combining analogical thinking and metacognition. Time is a necessary resource for cognitive processes to lead to double loop learning and to produce necessary shifts of worldviews (Byrne & Shepherd, 2015).

Organizational culture and learning from failure. The social character of work explains the importance of cultural influences, such as power, politics, values, beliefs, and expectations, on the process of learning from experience. Both the experience of failure and the public reaction to it influence the process of organizational learning (Desai, 2014; Wang et al., 2019). As part of their framework for organizational learning from errors, Catino and Patriotta (2013) stressed the importance of the impact of social and cultural systems and processes on the affective and cognitive processing of experience that produces learning. The organizational culture (social systems and structure, hierarchical relations, shared beliefs, sanctions, and motivations) shaped how people in Catino and Patriotta's study sensed, interpreted, and made sense of errors. Those social influences affected the perception and interpretation of failure experiences

by individuals and teams (Catino & Patriotta, 2013). Catalano, Redford, Margoluis, and Knight (2018) described the evidence of failure avoidance in organizations, and Desai (2014) highlighted the effect of impression management that led to underrepresentation, minimization, and sometimes concealment of failures in organizations. Organizational culture is a fundamental sensemaking resource, and Catino and Patriotta described two types of organizational culture that impacted learning in two different ways**.** People in organizations with blame cultures see errors and failures as a sign of incapacity. Such cultures inhibit the reporting and discussion of problems and affect the detection of errors and learning from them (Catino & Patriotta, 2013). Catalano et al. confirmed that many organizational cultures stigmatize failure and those who fail, instilling a general refusal to acknowledge and discuss such experiences and often redefining them as successes. In contrast, in organizations with a just culture clear lines exist between acceptable and unacceptable risk-taking behaviors, and employees receive encouragement to uncover and discuss problems; such nonpunitive culture encourages learning from experiences (Catino & Patriotta, 2013). Leadership is a fundamental element of culture and one of its most potent sensemaking mechanisms. Managers support learning by setting expectations, modeling behaviors, establishing climate of psychological safety via coaching and communication.

Organizational sensemaking theory. The concept of organizational sensemaking applies to this study. This concept describes how people in organizations make sense of their experience reinforcing the connection between thinking and acting (Weick & Sutcliffe, 2015). Weick and Sutcliffe (2015) represented sensemaking as an

ongoing process of evaluating the mismatch between the experience of reality resulting from people's actions and their preconceived notions and expectations of that reality, which is central to learning from experience. Sensemaking, a logical step in the process of learning and adaption, starts with sensing such a mismatch, leads to noticing the gap between the expected and the real state of the world, and results in breaking the expectation of continuity of experience (Calvard, 2015; Weick & Sutcliffe, 2015). Sensemaking involves collection and interpretation of information about environment, followed by assigning meaning to information to use it for action (Moon, Sejong, & Valentine, 2017). Sensemaking is the process of the continuous verification of an ongoing action and simultaneous fine-tuning of such action by creating plausible explanations of the impact of such action that informs the next step (Owen et al., 2018; Sandberg & Tsoukas, 2015; Steinbauer, Rhew, & Chen, 2015). Understanding managerial and organizational sensemaking is critical to understanding the process of managing uncertainty and the concepts of organizational learning, adaptation, managing the unexpected, as well as resilience and studying high-reliability organizations (Weick & Sutcliffe, 2015). The theory of sensemaking connects to the purpose of this study in several ways: its interest in extracting knowledge from direct experience, its focus on social and communicative aspects of sensemaking in organizations, its evolutionary character, its understanding of the influence of organizational culture on knowledge creation, and the analysis of the role of managers.

Conceptually, sensemaking is an acting–thinking cycle. It is the process of asking and acting while attempting to understand what is happening, what it means for an

individual or their team, and what should they do or know in this situation (Sandberg & Tsoukas, 2015). A critical characteristic of the sensemaking cycle is an ongoing process of thinking by acting, while acting, and through acting that is continuously updated by the impact of the action on the unfolding circumstances (Sheng, 2017; Weick & Sutcliffe, 2015). Therefore, sensemaking is the process of translating knowledge from direct experience into knowledge by description, which is critical for creating and sharing knowledge in organizations. Such translation happens when actors attempt to connect cues perceived from their immediate experience to theoretical concepts used to explain the world, its organization, and its workings. The ongoing flux of events often brings data that do not fit known concepts or even contradict them. Weick and Sutcliffe (2015) highlighted the paradox between knowing and not knowing, recalling and forgetting, and sensemaking and sense-discrediting as central to the effective functioning of organizations in an unpredictable and volatile environment. The acting and thinking nature of sensemaking in social environments adds importance to understanding the role of mental models, preconceived notions, and accepted ways of doing things in organizations.

As people in organizations go through their experiences together, organizational sensemaking, which is crucial for its adaptation and effectiveness, depends on effective social interactions and the level of trust among its members (Sandberg & Tsoukas, 2015). The sensemaking process and the resulting useful knowledge depend on the ongoing conversation between all critical players: the actors facing the direct experience, their teammates and supervisors, and the organization. For organizational

adaptation, the organizational members create useful learning by translating knowledge by direct experience into knowledge by description (Calvard, 2015). Such translation depends on effective communication skills, sense of agency, readiness to question preexisting beliefs, and trust in management support, ideally embedded in the organization's culture (Sandberg & Tsoukas, 2015; Weick & Sutcliffe, 2015). Managers need to establish and model these elements of organizational culture.

Sensemaking and learning from failure. Weick and Sutcliffe (2015) outlined the five principles of mindful organizing that are critical to effective performance in volatile, fast-changing environments: (a) strong attention to failure experience, (b) reluctance to simplify explanations of events, (c) strong awareness of ongoing operations, (d) organizing for resilience, and (e) decision-making by expertise. The first three of those principles relate directly to learning from experience. The first one, preoccupation with failure, addresses the need to direct attention to failure events as potential symptoms of hidden deficiency in an organization's worldview, strategy, structure, or processes. The focus of this principle is acceptance of the fact that, when affected by reality, actions always deviate from plans, and people, even the most competent and experienced, do not possess complete knowledge (Sandberg & Tsoukas, 2015; Weick & Sutcliffe, 2015). To implement the principle of preoccupation with failure, managers need to encourage constant, heightened attention to anomalies and resist the desire to explain them away by minimizing or normalizing them (Sandberg & Tsoukas, 2015). Preoccupation with failure has additional value in organizations going through extended periods of success that may result in a narrowed perception, breed overconfidence, and reinforce routine practices

and groupthink. The second principle, reluctance to simplify explanations, requires managers to consider every event as a combination of the known and the new, to intentionally slow down their thinking, and to encourage expression of opposing points of view (Calvard, 2015). These two principles, preoccupation with failure and constant questioning of existing beliefs, receive support through the heightened awareness of operations and together serve the process of ongoing sensemaking (Weick & Sutcliffe, 2015).

The role of managers in organized sensemaking. Managers play an important role in maintaining and shaping the process of organizational learning. Management actions influence sensemaking by shaping culture and values as frames of reference, by allowing and controlling the flow of information about direct experiences, and by encouraging and role-modelling a preoccupation with failure and reluctance to simplify (Steinbauer et al., 2015). Managers' influence includes exercising their power when accepting or rejecting facts and explanations and distributing rewards and punishments for sensemaking and sense-discrediting in the face of unfolding reality (see Weick & Sutcliffe, 2015). Practicing a conscious approach to daily operations, constant questioning of assumptions to uncover potential blind spots, establishing clear expectations (including identification of mistakes that must not be made), and encouraging people to speak up are among many practices that may support active adaptation and learning (Calvard, 2015; Weick & Sutcliffe, 2015). Training in interpersonal relating, assertive communication, and conflict management skills contribute to building organizational capability for sensemaking. Finally, being

accessible in problematic situations and deferring decision-making to those with expertise, not with formal authority, may support the fast development and application of actionable knowledge for ongoing resilient performance.

Organizational resilience. The concept of resilience originated from physics, ecology, and systems theory, where it refers to the ability of material or a system to resist stress and to return to its original form after adverse conditions subside (Hallak, Assaker, O'Connor, & Lee, 2018; Mamouni Limnios, Mazzarol, Ghadouani, & Schilizzi, 2014; Rodríguez-Sánchez et al., 2015). In later studies on child development and clinical psychology, resilience referred to the capability to cope with adverse conditions and overcome stress brought by extreme adversity or trauma (Vanhove, Herian, Perez, Harms, & Lester, 2016). In the organizational context, researchers mostly study resilience in application to groups operating in stressful occupations, such as firefighters, first responders, and military in active combat (Reivich, Seligman, & McBride, 2011; Vanhove et al., 2016). This concept also became central to the studies of high-reliability organizations operating in high-risk environments, where reliability of operations was more important than efficiency (Mamouni Limnios et al., 2014; Weick & Sutcliffe, 2015). A nuclear power plant, an emergency unit in a hospital, and an aircraft carrier are examples of high-reliability organizations.

In an organizational context, resilience came to represent the ability to maintain normal performance under significant disequilibrium events, both positive and negative, to regain stability of operations and to achieve organizational goals (Lawton Smith, 2017; Rodríguez-Sánchez et al., 2015). In addition, many scholars also included in the

definition of organizational resilience the ability for adaptive learning, growth, and positive change after adversity in an organization (Annarelli & Nonino, 2016; Britt, Shen, Sinclair, Grossman, & Klieger, 2016). In recent literature, the discussion of organizational resilience often includes the ability to bounce back from stress "stronger than before" (Rodríguez-Sánchez et al., 2015, p. 28).

Main approaches to organizational resilience. The three general approaches in discussing organizational resilience are behavioral, systemic, and developmental. The focus of the behavioral approach to organizational resilience is on employees' behavior in organizations and underscoring the role of resilient individuals who come together to create resilient organizations (Mamouni Limnios et al., 2014). The behavioral approach contributes to a multilevel perspective that includes individual, team, and organizational behaviors as building blocks of organizational resilience. This approach is the basis of most known resilience-building programs, such as the Master Resilience Training developed for the U.S. Army (Reivich et al., 2011). Individual behaviors and competencies, such as focus; determination; learning orientation; questioning; problem solving; managing emotions, energy, and counterproductive thoughts; and building relationships, are critical for team resilience (Reivich et al., 2011; Rodríguez-Sánchez et al., 2015). Resilient behaviors depend on many individual factors, as well as on the role-modeling and support by organizational leaders (Kahn et al., 2018; Nguyen, Kuntz, Naswall, & Malinen, 2016). In addition to individual behaviors, the team dynamics and the team leadership contribute to organizational resilience (Dimas, Rebelo, Lourenco, & Pessoa, 2018; Kahn et al., 2018).

A systemic approach to organizational resilience requires interaction and integration of external and contextual factors, such as organizational culture, positive relationship in teams, and team diversity (Lawton Smith, 2017). Team diversity and team relationships are important for resilience in organizations (Kahn et al., 2018; Mamouni Limnios et al., 2014; Nguyen et al., 2016). From a systemic perspective, managing for resilience should balance efficiency with adaptability and combine drive for unity with encouragement of diversity. Diversity of thought and experience contribute to systemic resilience, as they lead to the ability to recombine existing capabilities to see novel opportunities and address unexpected problems (Kahn et al., 2018).

Many researchers consider organizational resilience to be a developable capability useful for withstanding future adversity (Alliger, Cerasoli, Tannenbaum, & Vessey, 2015; Lawton Smith, 2017; Nguyen et al., 2016). The developmental approach considers resilience to be a relative and dynamic ability growing out of the interaction with specific challenging circumstances. Continuous learning from experience is an important product of resilience, including learning to adapt and learning from failure (Dimas et al., 2018; Lawton Smith, 2017). The important skills to develop for resilience are (a) a constructive perception of current, often painful events; (b) the development of tolerance for uncertainty; (c) positive adaptive behaviors, including overcoming past failures; (d) practicing resourcefulness, building helpful relationships, and reaching out for external support networks; and (e) developing self-awareness and the individual's own response repertoire to maintain performance (Lawton Smith, 2017; Rodríguez-Sánchez et al., 2015).

The multilevel view on organizational resilience. The behavioral, systemic and developmental approaches to organizational resilience contributed to the multilevel view of organizational resilience as combination of individual, team, and organizational resilience. The basis of individual resilience is two main building blocks: motivation for learning and creating and sharing resources (Caniëls & Baaten, 2019; Kahn et al., 2018). In addition, the combination of individual strengths, such as self-efficacy and interpersonal relationship skills, forms a strong basis of team and organizational resilience.

Teams are building blocks of modern business organizations. Resilience may be an important factor for team performance, especially under conditions of uncertainty (Alliger et al., 2018). Team resilience increases through problem-solving networks and by strengthening team relationships that facilitate the exchange and processing of information perceived by its members (Rodríguez-Sánchez et al., 2015). Transformational leadership, teamwork, and other team processes that promote self-efficacy and a sense of team effectiveness, and the processes that support a learning-goal orientation, are among the critical factors that contribute to team resilience (Dimas et al., 2018; Linnenluecke, 2017; Rodríguez-Sánchez et al., 2015). To develop resilience, the team needs to learn constantly and apply newly acquired learning to novel situations by focusing on sharing and recombining knowledge to avoid cognitive rigidity and to promote resilience.

The basis of organizations is teams, and team resilience forms part of the larger organization's ability to perform and grow from adversity. As teamwork and learning

orientation contribute to organizational resilience, the organizational culture, strategies, and processes, in turn, influence those teams and their resilience (Rodríguez-Sánchez et al., 2015). Specifically, the organizational processes that contribute to the team and individual learning, facilitate access to resources, encourage learning from experience, and allow restoring efficiency are critical for connecting individual, team, and organizational resilience (Roussin, MacLean, & Rudolph, 2016). Organizing for resilience requires balancing exploration and exploitation by constantly improving competencies for mindful organizing, flexible recombination of existing resources, innovation management, managerial agility, and improvisation (Klockner, 2017; Linnenluecke, 2017). Additionally, work–life balance, career development, equity, and two-way communication are the critical organizational processes that contribute to organizational resilience (Rodríguez-Sánchez et al., 2015). Team and organization leadership plays an important role in shaping such systems and processes.

The role of leaders in building team and organizational resilience. As leaders assemble and build teams, establish team processes, and model desired behaviors, they influence individual and team resilience. Employee resilience significantly relates to leadership behaviors (Alliger et al., 2015; Nguyen et al., 2016). As resilience is an emergent, process-oriented, and social concept, leaders can facilitate it by shifting some attention from acting to relating, as opposed to a total focus on results (Matyas & Pelling, 2015). By establishing flexible decision-making rules and maintaining constant access to a variety of cognitive, psychological, and social resources, leaders contribute to improved stress management, strengthen problem-solving skills, and facilitate the development of a

broader range of team responses to external and internal challenges (Britt et al., 2016; Ye, Wang, & Li, 2018). Moreover, by building trust within teams, training, and modeling the constructive expression of both negative and positive emotions, managers can strengthen resilience (Shepherd & Patzelt, 2018) and lead to improved learning and adaptation in their organizations.

Contrasting Theories

Vicarious learning. Researchers often consider vicarious learning to be the opposite of experiential learning. Vicarious learning, defined as an indirect, observational, one-way method of acquiring knowledge, often applies to a passive imitation of approaches and actions of others (Mansoori, 2017). Based on the social learning theory formulated by Bandura in the 1970s, vicarious learning happens when a learner observes the actions of another person (a model) and imitates the behavior (Illeris, 2018; Myers, 2018; Shepherd & Patzelt, 2018). Researchers of organizational learning identified the following critical steps of the vicarious learning process: learners (a) focus attention on a model, (b) retain information about their actions, (c) duplicate those actions, and (d) face a reinforcement to apply the learned behavior in the learners' context (Myers, 2018; Myers & DeRue, 2017). These processes are internal to learners and develop independently of the event or the observed model. According to the classical view on vicarious learning, these processes happen via a direct observation or via symbolic processing using written or video and audio-recorded accounts of the model. For the experience of others to serve as an input into vicarious learning, learners need to have exposure to the event and receive enough details about it (Illeris, 2018). The

classical views on vicarious learning became visible in organizational research at the end of the 20th century (Kalkstein, Kleiman, Wakslak, Liberman, & Trope, 2016; Myers & DeRue, 2017) and continued to evolve together with the evolution of the organizational context and other topics relevant to modern organizations, namely leadership, team and innovation management, and organizational resilience.

There are two central lines of tension in the views on vicarious learning. The first one relates to the learner's agency, and the second one involves the relationship between the learner and the model. Agency, defined as intentional behavior directed at influencing one's circumstances and choice of actions, is a central concept in learning and self-development (Myers & DeRue, 2017). Most of the reviewed sources presented vicarious learning as a low-agency process focusing on building learning structures used to create learning opportunities and to channel learning to employees for passive imitation. However, this classical view gradually loses relevance in knowledge-intensive and flat modern organizations (Myers & DeRue, 2017). While building learning structures and introducing formal learning processes (e.g., communities of practice and knowledge transfer systems) is important, the presence of these structures and processes does not motivate or guarantee that the employees will use them to learn (Myers & DeRue, 2017). In the fast-paced, volatile, and increasingly interconnected business environment, vicarious learning cannot happen unless the focus is on active learners and their cognitive and behavioral processes (Bai, Lin, & Liu, 2017; Myers & DeRue, 2017). When knowledge exchange is happening among interconnected people, the relationships between a learner and a model, as well as their team and organizational relationships

become increasingly important (Carmeli & Dothan, 2017; Mansoori, 2017; Myers, 2018; Myers & DeRue, 2017). Although proactive learners choose where to place their attention and what experiences to imitate, the relational microprocesses within learning dyads, teams, organizations, and industries play a critical role in shaping the learning environment.

As the learner and the model enter the vicarious learning process, they form a relationship that influences the content and pace of the learning and integration. Social interactions are important for successful vicarious learning in entrepreneurial education when the model and the learner engage in a discussion of the model's experience creating useful knowledge for both (Mansoori, 2017). Beyond training and educational context, researchers have described the impact of micro relational processes on vicarious learning in the information technology, pharmaceutical, aerospace product development, and other industries (Carmeli & Dothan, 2017; Myers, 2018). Mansoori (2017) underscored the central role of social interactions in capturing and internalizing relevant knowledge. Carmeli and Dothan (2017) confirmed that generative work relationships served as facilitators for learning in organizations. Finally, Myers (2018) proposed a concept of coactive vicarious learning as a process of joint meaning-making out of work-related experiences. Regardless of their differences, all interpretations of the vicarious learning theory confirm its benefits for organizations.

Vicarious learning is valuable for organizational development, learning, and performance. Vicarious learning facilitates the capture and internalization of novel concepts and provides relief from the heavy cognitive demands of learning from

experience that require simultaneously attending to the unfolding experience and learning from it (Mansoori, 2017). By helping eliminate redundant learning experiences, vicarious learning helps reduce the cost of knowledge creation and organizational inefficiencies and accelerates the acquisition of knowledge (Myers, 2018; Myers & DeRue, 2017). In high-risk environments known for a tight connection between tacit and explicit knowledge, vicarious learning helps to manage the risks of experimentation, thereby decreasing potential damages and increasing chances for organizational and businesses survival (Myers & DeRue, 2017). Vicarious learning processes support dynamic learning capabilities in individuals and teams by contributing to the organization's transactive memory, which refers to a shared awareness of where knowledge is situated in organizations, and by expanding collective response repertoires that contribute to organizations' resilience (Argote & Guo, 2016; Myers, 2018). Finally, as it happens within relational systems in organizations, the process of vicarious learning helps to build trust, affective commitment, group effectiveness, and innovativeness (Carmeli & Dothan, 2017; Myers, 2018). However, despite agreement about benefits of vicarious learning for organizations, there is a continuing debate about the interaction, combination, and relative advantages of vicarious and experiential learning.

Although some interpretations of vicarious learning included the role of the learner agency and relational context and acknowledged experience as the primary input for learning, extant research confirmed pronounced differences between the two methods: experiential and vicarious. Both processes are necessary for the acquisition and retention of new knowledge; the process of vicarious learning results in the realization of the need

to change work methods, while the internalization of such new methods happens through experiential learning (Mansoori, 2017). In developing their concept of high-agency vicarious learning, Myers and DeRue (2017) noted that vicarious learning has more of a connection to the experiential learning through a perspective on learning as a continuous cycle of converting daily experiences in abstract concepts to use them to inform future actions. Based on their research of direct and indirect learning in the information technology industry, Carmeli and Dothan (2017) noted that while experiential learning increased the urgency and agility of innovation, vicarious learning improved the quality and uniqueness of it. Finally, researchers have noted that vicarious learning helps reduce heavy cognitive load, redundant experimentation, and financial and emotional costs of experiential learning and influences the significant reduction of failure rates (Carmeli & Dothan, 2017; Myers, 2018; Myers & DeRue, 2017). When acknowledging the numerous specific benefits of vicarious learning for organizations, it is important to consider what managers can do to facilitate it.

Managers shape work environments by establishing structures and processes and by modeling desired behaviors. Social context facilitates communication, so establishing generative work relationships and trust in teams could facilitate vicarious learning in groups (Carmeli & Dothan, 2017; Myers & DeRue, 2017). Acknowledging the importance of roles and structures as facilitators of learning, Tuschke, Sanders, and Hernandez (2014) confirmed the decisive role of structural connections between the model and learning companies via shared board membership. Managers could also role-model active learning and learning-goal orientation, which may support both vicarious

and experiential learning (Matsuo, 2015; Myers, 2018). Based on reviewed sources on both experiential and vicarious learning in a business context, managers have access to a broad repertoire of tools and strategies to facilitate both to support learning and performance in their teams.

Knowledge creation theory. Organizational knowledge creation theory (OKCT) originated from the branch of organizational science in which researchers studied sources of competitive advantage in the knowledge economy. Organizational knowledge in combination with practical experience and wisdom constitutes the basis of organizational innovation, competitiveness, and growth (Barley, Treem, & Kuhn, 2018). The theory contains a description of how people in organizations create, store, retrieve, and share such knowledge as a source of innovation, value creation, and performance improvement (Brix, 2017). Nonaka defined organizational knowledge as a process of identifying, expanding, and sharing new knowledge created by individuals and connecting it with an organization's existing knowledge (Barley et al., 2018). Although knowledge creation is only the first step of organizational learning (Brix, 2017) stemming from an individual employee's experience within teams, the OKCT and its concepts, namely tacit and explicit knowledge, the knowledge conversion process, and the role of leadership in creating organizational knowledge, provide an original perspective on the topic of this study.

According to the OKCT, the starting point of organizational knowledge creation is the embodied experience of an individual that leads to the creation of tacit knowledge (Argote & Fahrenkopf, 2016; Barley et al., 2018). Researchers later suggested that

knowledge develops through the continuum between the tacit knowledge and the explicit one, the latter understood as knowledge captured in language and shareable via communication, processes, and systems (Chuang, Jackson, & Jiang, 2016; Engestrom, 2018). Nonaka added to this continuum a third form of knowledge, called practical knowing or *phronesis* (reflection in action), that brings value judgment and pragmatism to the process of creating organizational knowledge (Arbi, Kausar, & Salim, 2017). According to the OKCT, a cycle of conversion of tacit knowledge to explicit, and then transforming explicit knowledge to a new explicit form and integrating it back to a new tacit knowledge, all the way complemented and supported by the practical wisdom of phronesis, is the key process of creating new knowledge and ultimately learning in organizations

A description of the knowledge conversion process and its unfolding across organizational layers is the fundamental proposition of the OKCT that directly relates to the topic of this study. As the source of all knowledge is individual tacit knowing, the first stage of organizational knowledge conversion is articulation via social practices within a workgroup or team (socialization; Argote & Fahrenkopf, 2016). Through such articulation and conscious dialogue, tacit knowledge becomes available for sharing within and between teams (externalization) and for subsequent aggregation with the existing explicit knowledge (combination), which enables organized experimentation with the new explicit knowledge in application to organizational practice. Such experimentation helps justify the usefulness of the new knowledge with phronesis, which leads to its acceptance as the new tacit knowledge (internalization; Arbi et al., 2017). Of

interest to this study, the first three out of four stages of this process, namely socialization, externalization, combination, take place within a team context**.** Brix (2017) highlighted that externalization and combination of knowledge at the group level involved collective sensemaking and sense-giving, while management facilitated this process by creating context and providing strategic focus. The management of organizations holds the context and the focus for knowledge creation, thereby influencing the process in several ways.

Management of teams and organizations influences the process of organizational knowledge creation both intentionally and unintentionally. First, managers set organizational routines, manage organizational processes, and articulate conceptual frames for knowledge creation (Brix, 2017; Chuang et al., 2016). The work involves a combination of transactional and transformational leadership approaches (Caniëls, Semeijn, & Renders, 2018). On the formal, transactional side, this process requires actively managing cycles of knowledge diversion and conversion, formulating problems, providing space and time for reflection, guiding the discussion, offering motivation and rewards, and creating and supporting redundancy of information (Ye et al., 2018). On the transformational side, leaders set the tone and steward the process by empowering and motivating employees and teams by providing autonomy, asking challenging questions, and modeling and encouraging the culture of experimentation (Shepherd & Patzelt, 2018). Besides knowledge creation, management's responsibility is to drive performance and increase competitiveness. Middle and top managers maintain organizational ambidexterity by balancing between focus on creating new knowledge (exploration) and

driving effective performance (exploitation; Sheng, 2017). Supporting collaboration across organizational boundaries, planning strategic rotations between functions, providing access to company-wide information, and supporting diversity of thought are some concrete management actions that may support organizational knowledge creation and facilitate learning in teams.

Despite standing apart from other organizational learning theories, the OKCT cannot be completely separate from them. Knowledge creation is the first step in the organizational learning process, followed by knowledge retention, structuring, and sharing (Brix, 2017). Knowledge creation contributes to organizational learning, not only by improving its understanding of the environment, but also by expanding organizational capacity to act and enabling capacity for effective performance (Brix, 2017). Such a contribution becomes possible only as a result of the decisions about the use of created knowledge made by managers capable of discerning the applicability and value of such knowledge for the business (Brix, 2017). Empirical studies of managerial strategies to encourage learning provide additional perspective on the topic of this study.

Themes and Findings from Empirical Studies

Multilevel practice of learning. To facilitate their teams' learning experiences, leaders need to understand the multilevel elements of learning. Different processes and structural elements come into play as the learning process unfolds on the individual, group, and organizational levels (Chadwick & Raver, 2015; Lei, Naveh, & Novikov, 2016). Pokharel and Choi (2015) studied the introduction of learning cultures in a large American public service agency and confirmed that organizational learning serves as a

mediator between individual learning and team performance. Recent research of health care and aerospace industries in the United States and Europe indicated the importance of managing power asymmetries and power balance on an organizational level (Van de Ven et al., 2017), as those may impede risk-taking and transparency and may trigger impression management that precludes learning (Desai, 2014). In their research of German retail and engineering companies, Putz, Schilling, Kluge, and Stangenberg (2012) discovered that organizational factors, such as operating procedures and task structures, influence organizational learning. Finally, in a study of Indian steel manufacturing companies, Jain and Moreno (2015) established the importance of motivation and rewards systems to support learning in organizations. Most managers do not have direct influence over the organization-level processes that affect learning in their teams, but they can reshape and implement the processes on the team level.

On the job, team leaders and project managers have direct involvement in the team dynamics. Several recent studies of marketing and sales, administrative, and top management teams across a range of industries indicated that team diversity, relationships, and social networks, as well as psychological safety and trust, are the key elements influencing team learning (Edmondson, 2019; Edmondson et al., 2016; Ortega, Van den Bossche, Sánchez-Manzanares, Rico, & Gil, 2013; Sheng, 2017; Ye et al., 2018). Besides shaping the learning capabilities of their teams by discrete management actions, like hiring for diversity or introducing formal learning processes, managers influence their teams' learning by role-modeling desired behaviors, such as constructively dealing with emotions, developing a learning-goal orientation, and

improving other competencies and behaviors (Carmeli & Dothan, 2017; Ortega et al., 2013), discussed in a separate section below. In their ongoing research of the topic, Carmeli and Dothan (2017), Edmondson (2019), Edmondson et al. (2016), and Stephens and Carmeli (2016) continued to study and confirm the importance of building psychological safety and trust as main precursors of both team and individual learning.

In addition to maintaining psychological safety to support the learning of individual employees, managers facilitate learning by role modeling desired behaviors. Such behaviors as leaders' tolerance for mistakes, transparency, and openness resulted in an increase in individual learning in multinational companies and military units (Catino & Patriotta, 2013; Weinzimmer & Esken, 2017). In addition, managers who consistently create learning opportunities, provide challenging tasks, and give timely and candid feedback positively affect individual and team learning (Seibert, Sargent, Kraimer, & Kiazad, 2017; Zhou et al., 2015). The strategies covered in this section may also support organizational processes and systems to embed learning into the daily work of organizing and managing projects and tasks.

Organizing for learning. The daily job of management often includes planning, communicating objectives, providing feedback, allocating tasks, reviewing projects, and evaluating performance. Research confirms that many of those actions may support or impede learning (Frese & Keith, 2015). Sitkin (1992) proposed that when managers acknowledge the probability of failure, they may start embedding learning opportunities into their plans by envisaging controlled experiments, small failures, and similar events, which, when supported with structured learning sessions, transparent communications,

and rewards for risk-taking, may dramatically boost experimentation, innovation, and learning. Weick and Sutcliffe (2015) and Klockner (2017) described *mindful organizing* as an approach to organizing work processes with due focus on relationships, transparent inclusive communication, time and space dedicated for collective reflection, and encouraging diversity of thought and critical thinking. Several researchers have subsequently tested the principles of mindful organizing and confirmed their positive impact on learning in a variety of contexts, including air-traffic control, construction, and infrastructure consulting (Frese & Keith, 2015; Savelsbergh et al., 2016). Having properly organized and explained the work processes, managers need to shift attention to developing people.

Developing skills and competencies for learning. Employee skills development can happen intentionally and unintentionally (Savelsbergh et al., 2016). Managers influence the former via formal employee training, while supporting the latter with a variety of on-the-job tools. Extant research supports the benefits of experiential developmental strategies: (a) creating formal developmental networks for novice medical scientists supported their learning and career development (Dunn, 2017), (b) mentoring female South Asian leaders accelerated their professional development and leadership maturity (Harvey et al., 2017), (c) providing challenging assignments supported the development of strategic skills among senior managers (Hezlett, 2016), and increased the performance success of employees of Chinese-listed companies (Zhou et al., 2015). Despite the growing body of research confirming the impact of on-the-job development strategies, O'Connell (2014) demonstrated the need for formal training to develop skills

for understanding and dealing with complexity, as well as to educate managers about the cognitive and emotional challenges of learning in a dynamic environment. Finally, several studies supported the positive impact of coaching to support employees' and managers' abilities for sense-making (Hahn, Preuss, Pinkse, & Figge, 2014), navigating unfamiliar environments (McNamara et al., 2014), and developing employees' role efficacy and relational and task management skills (Ladegard & Gjerde, 2014). As researchers continue to conduct studies that demonstrate the centrality of managers as a powerful developmental tool, the focus of researchers' attention moves to managers' personality traits, skills, and capabilities.

Self-leadership. The importance of system awareness and leading by example, and the ability to shift focus between multiple levels of learning in organizations, creates strong demand for managers' self-awareness and self-leadership. Leading in a fast-changing unpredictable world, managers face a host of challenges (Antonacopoulou & Bento, 2018). The review of extant research demonstrated that, in addition to the skills and competencies required for being a successful manager, specific traits and skills that support emotional, relational, and cognitive capacity may be more important for managers seeking to support learning in their teams (Edmondson et al., 2016; Nembhard & Tucker, 2016). Given the presence of both negative and positive emotions during learning experiences, managers need to be aware of and able to manage their own emotions (Carmeli & Dothan, 2017; Shepherd & Patzelt, 2018; Stephens & Carmeli, 2016). To support learning in their teams, managers need a strong learning-goal orientation (Porter et al., 2016) and the capability to be mindfully present with the

managers' own experiences and the experiences of their employees (Heslin & Keating, 2016). Several researchers confirmed a positive connection between emotional intelligence and managers' abilities to build and support learning teams (Boyatzis, Rochford, & Cavanagh, 2017; Kaufmann & Wagner, 2017; Stephens & Carmeli, 2016). Finally, O'Connell (2014) and Appelbaum, Calcagno, Magarelli, and Saliba (2016) suggested the importance of system awareness, while other researchers confirmed the positive impact of strong metacognition and a well-developed perspective in successful managers across industries (Hahn et al., 2014; Weick & Sutcliffe, 2015). The focus of this study will be on managerial strategies to encourage and facilitate learning from experience, and the self-management and self-development strategies need to be in its scope.

Transition

The purpose of this qualitative multiple case study was to explore strategies managers use to encourage and facilitate their teams' learning from experience. In Section 1 of this study I presented the problem, reviewed the study design, and explained this study value for business practice and its potential impact on social change. I provided a review of the experiential learning theory and experiential learning framework, selected as a conceptual framework of this study. I reviewed concepts related to organizational learning and sensemaking, followed by a discussion of related models of organizational resilience, vicarious learning, and knowledge creation. The ability to experiment constantly and learn from experiences is important for an organization's performance and ability to compete successfully in the constantly changing global marketplace. Scholars

concluded that successful and failing experiences bring valuable learning but require different approaches and strategies. Strategies include rebalancing focus on exploration of new vs. exploitation of existing approaches, recombination of single, double, and triple loop learning, and building psychological safety and trust.

In Section 2, I will include details of the research method, ethics, and research design, and the methodology to ensure the study's trustworthiness. In Section 3, I will present the study findings, outline their application to professional practice, significance for social change, and offer recommendations for future research in the area of organizational learning. I will conclude this study with final reflections on my research process and learning.

Section 2: The Project

Purpose Statement

The purpose of this qualitative multiple case study was to explore strategies that managers use to encourage and facilitate learning from project teams' experience. The targeted population comprised senior managers from seven global corporations who had experience in leading both successful and failed projects. The geographical locations of these companies included the Midwestern and Western United States, Canada, the United Kingdom, and Europe. The implication for positive social change includes the potential to establish a risk-tolerant and innovative culture in organizations. This culture could support an improvement of organizational climate to build an atmosphere of trust and improved employee engagement to strengthen motivation and retention. Positive changes inside organizations could facilitate positive social change outside the organizations by bringing more stable employment and stronger support for the development of local communities.

Role of the Researcher

Qualitative researchers are the main instrument of data collection and analysis (Morse, 2015a; Yin, 2016), whose attitudes, beliefs, predispositions, and emotions form an integral part of the context, the process, and the final product of research (Erikson, 2018; Galdas, 2017; Tan, 2015). Because this was a qualitative multiple case study, I served as the main instrument of data collection. As part of the role of the researcher, disclosing the researcher's relationship with the context, the topic, and the participants contributes to the validity of a study (Sonuga-Barke, 2017; Yin, 2016). As an

international business executive, I have over 15 years of direct experience with managing teams and implementing projects. My interest in learning from experience grew from the start of my career, led me through a steep learning curve, and shaped my interest in uncovering lessons of direct experience. My global network of business contacts served as an inspiration for the topic and as a source of potential participants.

Another aspect of the role of the researcher is following the principles of research ethics, which ensures research quality. The Belmont report provides a description of the main responsibilities of the social scientist, which are to ensure respect for persons, minimize harm for human participants, and maintain justice in the selection of informants (U.S. Department of Health and Human Services. Office of National Research Protection, 2016). The principle of respect for persons requires researchers to obtain informed consent from all participants (Miracle, 2016). Under the beneficence principle, researchers should ensure that participation in a study does not harm participants (Ross, Iguchi, & Panicker, 2018). Following the principle of justice, researchers must be fair in their inclusion and treatment of the participants and offer them the right to withdraw (Miracle, 2016). To adhere to these principles, I obtained informed consent beforehand and included in the interview guide a reminder about the right to withdraw from the study without penalty. My study also involved minimal risks for participants, and I included the description of potential harm and the benefits of participation in the introduction to the interview.

Further, bias results from the effect of a researcher's values, beliefs, and attitudes that could distort the data and findings of a study (Galdas, 2017; Tan, 2015). However,

researchers can manage bias through several strategies. My interest in and direct experience with the phenomenon under study and my connection with the participant population may have contributed to researcher bias, which I mitigated throughout my project. Reflexivity, disclosure, collection of thick data, and exploration of negative cases are among the strategies recommended to mitigate researcher bias (Lincoln, Lynham, & Guba, 2018; Yin, 2016). Reflexivity is a combination of researchers' awareness of being part of the research context and a constant reflection on biases, theoretical beliefs, predispositions, and expectations (Lincoln et al., 2018). I used reflexivity to disclose my beliefs about the research topic and my relationship with participants in my study document. I also maintained detailed field notes and coding notes to capture my attitudes and reactions to the data I collected and analyzed, exploring deviant cases. Bracketing is an additional strategy to manage researcher bias and to differentiate personal insight from the data collected (Marshall & Rossman, 2016). To support bracketing of my personal views, I included field notes, triangulation and member checking in my case study interview protocol.

Interview guides help maintain the focus of interview questions on the research objective. Designing and testing an interview protocol for a qualitative study helps researchers to align their interview questions with their research questions and to frame interviews as inquiry-based conversations (Castillo-Montoya, 2016). In addition, interview protocols support methodological procedures: building rapport with participants, positioning the topic of the study, asking to confirm informed consent

(Eriksson & Kovalainen, 2015), and consciously completing the interviews. Thus, I used a case study protocol and an interview guide for my study.

Participants

The participants of this study were managers with more than 5 years of experience leading teams through successful and failed projects. I left the definition of the projects' success or failure to my participants. I focused on managers' strategies to encourage their teams' learning and differences between the strategies used after success and those following failure of the project. For any type of study, the selection of participants is a primary element of the study design (Yin, 2016, 2018). Qualitative studies do not support statistical generalization (Eriksson & Kovalainen, 2015), and the most important criteria for participant selection are the capacity to produce rich data and the potential to explore perspectives contrary to the research question (Yin, 2016). Additionally, selecting more than one participant is a recommended way to ensure the depth of data collection for a complex topic (Yin, 2016), and a thorough participant sampling is critical for the credibility of a study (Marshall & Rossman, 2016).

I used convenience sampling to identify the potential participants followed by purposive sampling to recruit an initial sample. I used my personal network of contacts to approach seven managers from multi-national corporations that met the selection criteria of being able to produce rich data. I established working relationship with my participants with an e-mail in which I outlined the purpose, method, and scope of the study. Additionally, constant and transparent communication is important for research success (Yin, 2016). I used e-mail as my principal communication method. An effective

recruiting e-mail is a personalized brief message of less than 300 words that outlines the research and includes a request for a personal meeting to present the study and to answer questions (Eriksson & Kovalainen, 2015; Marshall & Rossman, 2016). Common concerns related to research access are clarity of the study purpose, the burden on the participants' time, and the potential value of the completed research to the organization (Eriksson & Kovalainen, 2015). I drafted my e-mail messages to participants following these recommendations.

During the introductory meeting, I addressed participants' concerns, shared the research plan, and explained the requirements of the participants' participation and document disclosure. I explained the purpose of the study, the types of documents that might be useful, and the process of protecting the participants' privacy and the confidentiality of business information. I then asked prospective participants to provide me with access to relevant documents and explained the process of document censoring, collection, and storage. Further, reassuring confidentiality of the data and demonstrating readiness to share preliminary and final results of the research are elements of managing relationships with the participants (Marshall & Rossman, 2016; Yin, 2016). To establish relationships with my participants, I also described the process for data recording and the steps for maintaining confidentiality. Established working relationships with the participants contributed to the robustness of my research by easing access and encouraging participation.

Research Method

The method of this study is qualitative research. Researchers choose methods based on the methodological paradigm, research question, objective, and type of data to collect (Eriksson & Kovalainen, 2015; McCusker & Gunaydin, 2015). The positivist and constructivist paradigms of scientific inquiry inform quantitative and qualitative methods, respectively (McLaughlin, Bush, & Zeeman, 2016). Positivism supports the view that one objectively verifiable reality lends itself to measurement and quantification and is central to the quantitative research method (Patton, 2015). For this study, I selected constructivism, which is a methodological paradigm that reflects the view that people create reality for each other during social interaction and create reality in the process of joint discovery from emergent data. The focus of this study was on organizational learning from experience, which is a socially constructed, multilayered phenomenon, so the constructivist paradigm fits the area of my study.

Additionally, my research question relates to the managerial strategies to encourage and facilitate teams' learning from experience. The qualitative method fits the exploration of complex processes by understanding cognition and behaviors of individuals and groups (Ograjensek, 2016). The quantitative method, in contrast, supports establishing causal relationships by testing predetermined hypotheses using statistical analysis (Seonaidh, Ching, Fraser, Oke, & Anderson, 2015; Taguchi, 2018). I did not plan to test any hypotheses or establish causal relationships, so I did not select the quantitative method.

Further, the qualitative method was suitable for the data I was collecting and the analysis I needed to do. To explore managers' strategies to encourage learning from experience in their teams, I needed to understand their respective organizational context. The basis of a naturalistic inquiry, which is at the heart of qualitative research, is the principle that human behavior is inseparable from its natural context (Yin, 2016). However, quantitative research aims at statistical generalization by working with large samples of participants and using standardized instruments to collect data based on predetermined theoretical concepts (Eriksson & Kovalainen, 2015; Ograjensek, 2016). But instead I focused on a small sample of participants and collected mostly nonnumeric data that required interpretation using the inductive method to establish patterns and themes. Collecting rich data from smaller samples and using inductive analysis are characteristics of the qualitative research method (van Griensven, Moore, & Hall, 2014).

Finally, I considered but did not select mixed method research. Mixed method research includes both quantitative and qualitative approaches to provide for both breadth and depth of analysis (Denzin & Lincoln, 2018; McLaughlin et al., 2016). To leverage the benefits of mixing qualitative and quantitative methods, a researcher needs to possess substantial methodological expertise and to have access to considerable financial and human resources (McLaughlin et al., 2016). Not all research questions justify added complexity, time, and cost associated with the proper execution of mixed method research (van Griensven et al., 2014). My research question did not have a statistical component, so I decided to choose the qualitative method for my study.

Research Design

I selected a multiple case study over other qualitative research designs like phenomenology or ethnography. A research design helps guide researchers from the research question to data collection and the analysis of findings toward relevant conclusions (Ograjensek, 2016). The choice of a research design depends on the topic of the study, the research question, and the nature of phenomena under consideration (Yin, 2016).

I initially considered phenomenology as a potential design for my research. The focus of phenomenology as a design is on in-depth exploration, description, and analysis of the meaning individuals and groups ascribe to their lived experiences, which are unique in frequency and scope (Eriksson & Kovalainen, 2015; Marshall & Rossman, 2016). The subject matter of phenomenological research is internal, subjective experience of the participants in events, rather than their actions or the events themselves (Patton, 2015). The topic of my study is not the experience of managers whose teams' projects fail or succeed. My focus was on managerial strategies and their effect on teams' learning from successful and failed projects, common in any business organization. Therefore, I selected a design that supported exploring phenomena holistically and combining the data on individual experiences with the data on the specific context.

Another consideration was an ethnographic design. Ethnographic researchers use the key assumption of culture and its unique impact on the actions and experiences of people (Marshall & Rossman, 2016). As a research design, the basis and center of ethnography is on direct observations of how groups create and maintain culture and how

culture, in turn, shapes individual actions (Gobo & Marciniak, 2016; Marshall & Rossman, 2016; Patton, 2015). Although contemporary ethnographers employ interviews and artifact descriptions, ethnographic data collection relies on direct observation and often involves extended and intense fieldwork (Gobo & Marciniak, 2016; Patton, 2015). In recent decades, ethnography has gained acceptance as a valid research design for studies of organizational culture and performance (Gobo & Marciniak, 2016). Researchers of such studies consistently apply cultural perspective to the interpretation of findings and the application of recommendations (Patton, 2015). Although I recognize the influence of culture on organizational learning, I did not select ethnography as my study design, because my focus was not on culture but on managerial strategies and their impact.

A case study is a design applicable to research on complex phenomena unfolding in bounded time and place (Yin, 2018), which fit this study because organizational learning is a complex, socially constructed and context-specific phenomenon (Dresch, Pacheco Lacerda, & Cauchik Miguel, 2015; Myers, 2018; Zhou et al., 2015). The unit of analysis of a case study is inseparable from its context (Miles, Hubermann, & Saldana, 2019), which makes the design fitting to the social nature of learning and the connection between the process, the participants, and the product of learning. Another characteristic of a case study design is its application to a context where researchers have low control over phenomena that unfold in real time (Morgan, Pullon, Macdonald, McKinlay, & Gray, 2017; Yin, 2018). Additionally, a case study requires in-depth data collection from a limited number of units of analysis and involves the use of multiple sources, such as

interviews and observations of participants, document analysis, and artifact collection (Yazan, 2015).

Case studies can be single and multiple; they can also be holistic (focusing on a larger case) or embedded (including subunits of a larger case; Schwandt & Gates, 2018; Yin, 2018). The focus of single case studies is a single case in a distinctly bounded context (Harrison, Birks, Franklin, & Mills, 2017; Miles et al., 2019), whereas multiple case studies include several subunits within the same context (embedded) or several cases each in their own distinct context (holistic; Yin, 2018). Multiple case studies often produce results that are more robust (Yin, 2018). I wanted to explore managerial strategies to encourage learning in teams in distinct contexts; therefore, I selected a holistic multiple case design for my study.

Another consideration as part of the research design was data saturation, which is important for study validity. Failure to achieve it can negatively affect the credibility of case study validity (Fusch & Ness, 2015). Data saturation is the point at which no new information will come from new data or from an expanded sample (Patton, 2015). Several types of triangulation contribute to achieving data saturation and add to the robustness and credibility of a qualitative study: data triangulation, method triangulation, theory triangulation, and investigator triangulation (Flick, 2018; Fusch & Ness, 2015; Marshall & Rossman, 2016; Patton, 2015). I used method triangulation by collecting my data using interviews and document analysis. Member checking helps to ensure the accuracy of the data collected and to produce additional data (Morse, 2018) I

implemented member checking to check my interpretation of the collected data and to ensure that I did not omit relevant data.

Population and Sampling

The population of this study included managers from international companies with more than 5 years of experience of successful and failing projects. To select my cases, I implemented a purposive sampling strategy. In qualitative research, sampling refers to the selection of cases and information sources within cases, from which a researcher collects data to address the research question (Gentles, Charles, Ploeg, & McKibbon, 2015). The purposive sampling strategy involves the strategic selection of cases that possess rich information relevant to the research problem (Patton, 2015; Yin, 2016). Proposing a classification of purposive sampling strategies, Patton (2015) described the instrumental-use multiple case purposive sampling strategy aimed at selecting a diverse set of cases to produce generalizable findings that inform theory and practice in a particular field. As the purpose of my study was to explore managerial strategies that encourage and facilitate learning from experience in teams, I selected the instrumental-use multiple case purposive selection method as a sampling strategy.

In defining sample size, I followed the logic of the qualitative research method. Qualitative researchers seek to understand the complexity of phenomena and their context (Gentles et al., 2015). The primary concern of a qualitative researcher is depth, rather than breadth, of understanding, which justifies smaller sample sizes (Boddy, 2016). Discussing case selection for multiple case studies, Yin (2018) suggested using two types of replication logic: literal and theoretical. Using literal replication logic, a researcher

selects cases that predict similar results and, following theoretical logic, a researcher chooses cases that predict contrasting results for explainable reasons (Yin, 2018). Other qualitative research methodologists recommended minimum samples of four cases (Malterud, Siersma, & Guassora, 2015). Following the recommendation to pursue depth of understanding in qualitative research, Boddy (2016) noted that large samples could be too big for proper qualitative analysis. In their discussion of qualitative sampling principles, Malterud et al. (2015) proposed to use the concept of information power that suggested that for information-rich cases, smaller samples would suffice, especially for studies that include applied theories with highly specific cases or with participants capable of a high-quality dialogue. The unit of analysis for my case study was the manager who had experience in managing successful and failed projects, who could provide me with high-quality dialogue and rich details. Preliminary sample definition is necessary for research planning, as long as a researcher remains prepared to adjust it based on research findings (Gentles et al., 2015; Patton, 2015). I started my research with a preliminary sample of four managers.

Once data collection from my preliminary sample had started, as described above, I continued to expand my sample, using instrumental-use multiple case purposive selection method until reaching data saturation. Data saturation is a recommended criterion for determining sufficient sample size (Gentles et al., 2015; Patton, 2015). Data saturation is a point in data collection when adding new cases does not add new information (Boddy, 2016; Gentles et al., 2015; Malterud et al., 2015). Fusch and Ness (2015) defined the saturation point as the point when adding new data sources or analysis

does not yield new information, new themes, or new codes and when the data collected are enough for study replication. The main strategies to achieve data saturation are to follow a case study protocol and to collect rich and thick data using appropriate data collection methods (Fusch & Ness, 2015; Schwandt & Gates, 2018). I ensured access to rich and thick data by selecting participants with more than 5 years of managerial experience, with a background of leading both successful and failed projects. In addition, I included two data collection methods to the case study protocol: individual semistructured interviews with managers and document analysis. I achieved data saturation with Case 7. Table 1 provides the description of participants and selection criteria.

I sought to organize interviews in the participants' natural business setting, convenient for access to relevant documents. Additional strategies to achieve data saturation are to document the process, to use multiple sources for triangulation, to ask the same questions from multiple participants, and to maintain a chain of evidence via a case study database and audit trail (Fusch & Ness, 2015; Yin, 2018). Besides following these recommendations, I used member checking to clarify interpretation and collect additional data. In addition, I kept a research journal with detailed field notes to manage my bias and as a tool to track data saturation.

Table 1

Description of Participants and Selection Criteria

Case No.	Participant pseudonym	Managerial experience	Participant position, function	Industry and location
1	"Falko"	>35 years	Director, HR	Manufacturing, Midwestern United States
2	"Dennis"	>20 years	Co-Founder and CEO	B2B Services, Switzerland
3	"Megan"	>30	VP Global Business Unit	B2B services, UK
4	"Vanessa"	>20	Co-Founder and CEO	B2B services, Germany
5	"Libero"	15	Manager Marketing Communications	Technology, Canada
6	"Magpie"	20	National VP Service Line	Management consulting, Canada
7	"Natasha"	>20	VP HR	Technology, Midwestern United States

Ethical Research

The primary goal of research ethics is to protect the rights of human participants and to advance scholarly knowledge without creating unjustified risks for them. In my study, I followed the ethical framework for research on humans outlined in the Belmont report (U.S. Department of Health and Human Services. Office of National Research Protection, 2016). The Belmont report included a discussion on three main ethical research principles: respect for persons, beneficence, and justice (Miracle, 2016).

The principle of respect for persons prescribes that all human participants confirm their informed consent to participate in the research (Yip, Han, & Sng, 2016). The informed consent form is a formal document with an outline of the purpose of the research, the data collection procedures, the measures to protect participants' confidentiality, the risks and benefits of participation, and the options to withdraw from

the study (Miracle, 2016; Thomas & Pettitte, 2016; Yip et al., 2016). Before the start of the proposed study, I sent the informed consent document to prospective participants by e-mail. I gave participants up to 14 business days to study the informed consent document at which time I sent a follow-up email to seek their participation and offering to answer their questions or address any concerns. I received approval from the Walden University Institutional Review Board # 04-17-19-0651601.

The participants could withdraw from my study at any point by notifying me by phone or e-mail. An appropriate withdrawal process is simple, is communicated in advance, and does not require an explanation of the reason for withdrawing (Thorpe, 2014). In case a participant intended to withdraw from the study, I planned to destroy all data collected from them and, to the extent possible, edit it out of my research notes and findings. No participants withdrew from the study.

I did not offer any incentives for participation. Researchers use incentives to compensate participants for their effort and time dedicated to a study but should not use incentives as a motivation to participate (Tripathi et al., 2018; Yip et al., 2016). As a token of appreciation for participants' contribution to my research, I offered a $5 Amazon gift card, a copy of the summary of research findings, and an offer to present the research insights to their organizations.

Protecting the confidentiality of participants' and their businesses' information is important. Fully anonymous participation is not possible in qualitative research, so special measures need to be in place to protect participants' privacy and the confidentiality of their information (Kirilova & Karcher, 2017; Miracle, 2016). At the

start of the process, I created pseudonyms that I used in interview transcripts and research notes to protect participants' confidentiality. I censored all identifying details from the documents that underwent review before collecting them. I kept all the electronic files on password-protected devices and all paper documents and field notes in the locked safe box in my office. I will destroy all data in 5 years after study completion.

Data Collection Instruments

As a researcher, I was the main instrument for my qualitative multiple case study. In qualitative research, a researcher seeks to collect rich data about people's experiences in their natural settings (Denzin & Lincoln, 2018; Patton, 2015). The hallmark of the case study method is collecting data from multiple sources, including interviews, private documents, and public records (Yin, 2016). To guide and structure my data collection, I used a case study protocol and an interview guide.

To maintain consistency in, and focus on, my study, I used the case study protocol. Case study protocols help guide the data collection and ensure its connection to the research topic (Yin, 2016). To maintain a focus on my topic and remain flexible in my data collection, I formatted my protocol as a list of topics and used it as a guide to maintain consistency during my research. To support the use of a case study protocol as a standard of investigation, Yin (2018) recommended drafting the document to include the objective of the study, main data collection procedures, a draft report outline, and the list of topics for investigation. In addition, research protocols should serve as mental frameworks and support for researcher neutrality and should allow for flexibility in data collection (Yin, 2016). My case study protocol included my study objective, the initial

list of topics for research, the fact that semistructured interviews and document collection would serve as data collection methods, the interview guide (Appendix A), and the data collection matrix (Appendix B) as additional support documents.

During the interview process, I used an interview guide. Interviewing participants is the most practical way of collecting information about their experiences and is the main channel for the social construction of knowledge related to the research topic (Eriksson & Kovalainen, 2015; Patton, 2015). A high-quality interview guide provides flexible support for the data collection process (Arthur, Mitchell, Lewis, & McNaughton Nicholls, 2014). I used semistructured interviews, so my interview guide included the research objective, the research question, the structure of the interviews, and the list of probes and reminders to follow up with additional questions to generate rich and thick data. The interview guide appears in Appendix A.

As part of the data collection process, I collected company and public documents. Researchers often use documents in qualitative studies to provide context and background of the case (Marshall & Rossman, 2016) and to support the understanding of the participants' experiences with the research phenomenon (Patton, 2015). Organizations usually produce large quantities of written data (Prior, 2016). To support an efficient collection of relevant documents, researchers need to assess the types of potentially relevant documents and their estimated quantity, formats, size, and scope, as well as the requirements for access and retrieval (Yin, 2016). I collected internal project reports, project presentations, press interviews, and website announcements. To plan my

document sample and collection process, I created a document collection matrix (Appendix B).

In the process of data collection, I kept detailed field notes. Researchers use field notes to collect additional researcher observations and reactions to the field interactions, ideas, and issues to consider in future data collection and analysis (Koro-Ljungberg, MacLure, & Ulmer, 2018). Researchers often use field notes as an additional source of data, analytic insights, and suggestions for necessary adaptation of the study protocol and interview guide (Marshall & Rossman, 2016). I based my field notes template on these recommendations.

To enhance the reliability and validity of my data collection instruments, I followed the requirements for trustworthiness of qualitative research. The principles of credibility, dependability, conformability, and transferability contribute to the trustworthiness of data collection (Morse, 2018). To support credibility, Patton (2015) recommended clearly describing the connection between collection instruments and the research objective and conducting member checking. All my data collection instruments referred to the research objective and mentioned member checking as one of the steps of the data collection process. Triangulating data sources and methods of collection, as well as keeping detailed field notes, supports the confirmability of data collection (Marshall & Rossman, 2016). to increase the trustworthiness of my study, I combined interviews, document analysis, my literature review, and field notes as my sources and methods for data collection,

Data Collection Technique

This study involved exploring managerial strategies to encourage and facilitate tlearning from experience in teams. For data collection, I used semistructured interviews with managers and document analysis. Interviewing is the main data collection technique for many qualitative designs (Morse, 2015a). Semistructured interviews combine structure with the flexibility necessary for a deeper understanding of participants' perspectives on a research phenomenon (Brinkmann, 2018). Collecting written documents is one of the four sources of data in qualitative research (Prior, 2016). Researchers often use documents to supplement other sources of data (Marshall & Rossman, 2016). I used document collection to supplement data gathered from semistructured interviews.

The interview guide (see Appendix A) contained three sections: introduction, main section with the list of follow-up questions and probes, and summary of the next steps. The introduction section included steps to introduce the purpose of the study and to establish rapport with a participant. The main section contained seven questions related to the research question. Each question included reminders for follow-up questions and probes. The summary section included the completion question**,** the discussion summary, and a description of the steps following the interview. A follow-up meeting for member checking was one of the steps after the face-to-face interviews.

During document collection process, I collected primary and secondary data. As part of the data collection, qualitative researchers often gather secondary data (i.e., from a company website or media) and primary data such as meeting minutes, reports,

announcements, and private correspondence (Marshall & Rossman, 2016). I have outlined the size and access path to each type of document in the data collection matrix and included a request for the documents in the informed consent form.

All data collection methods have advantages and disadvantages. Semistructured interviews provide the structure and flexibility necessary for the structured collection of rich data, but interviews require a lot of effort, and their quality depends on the researcher's interviewing skills (Patton, 2015). Another disadvantage of interviews as a data collection technique is that sometimes the participants' lack of awareness and eloquence might affect the quality of data (Marshall & Rossman, 2016), which is my case did not happen. The advantage of document collection is the production of large amounts of data related to observable and nonobservable aspects of a research phenomenon, while the amount of effort and time needed to collect and process various formats of documents is the main disadvantage of this data collection technique (Marshall & Rossman, 2016; Yin, 2016). Combining interviewing with data collection helped me to mitigate the disadvantages of both methods and triangulate the data collected during the study.

I used member checking in addition to triangulation to increase quality of my study. The informed consent form and the interview guide (see Appendix A) referred to a follow-up interview for member checking my interpretation of the data. The study did not include a pilot study.

Data Organization Techniques

I started data organization together with data collection in the field. Data organization is an ongoing stage of data analysis in qualitative research (Spencer, Ritchie,

Ormston, O'Connor, & Barnard, 2014). In the process of data collection and analysis, researchers reflect on the unfolding of their thinking in analytical memos (Spencer et al., 2014) that they need to store and organize together with the data. Careful organization of the data is the first phase of the qualitative data analysis that starts with creating a research database by formally arranging data and analytic notes (Yin, 2016). I organized my data in sets of records for each case. Researchers summarize case data and organize the data for analysis around preliminary categories developed from the conceptual framework (Spencer et al., 2014). To summarize my data, I used the framework presented in Figure 1. At this stage, I used close reading to study my data, censored confidential information, cleaned up the inconsistencies, and noted connections with literature. Researchers often use computer software to collect, process, and organize databases (Yin, 2018). For this study, I used NVivo 12 for Mac.

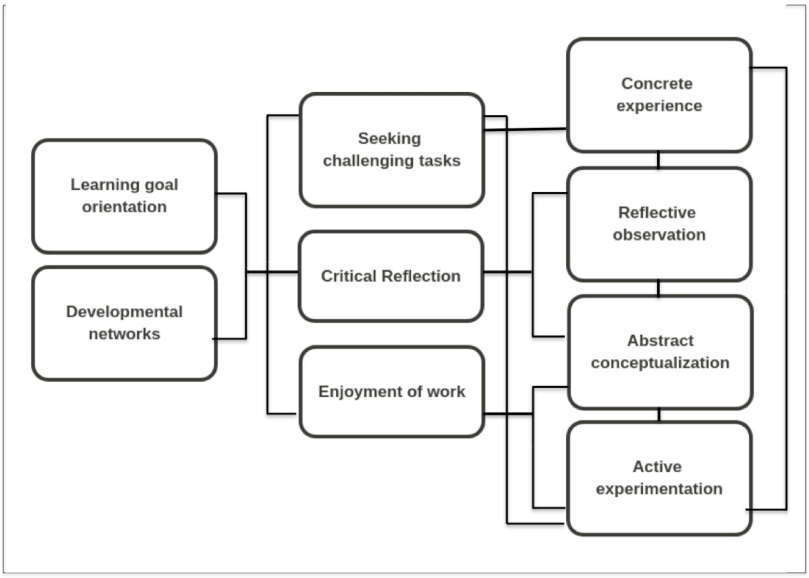

Figure 1. A framework for facilitators of experiential learning.

From "A framework for facilitating experiential learning," by M. Matsuo, 2015, *Human Resource Development Review, 14,* p. 447. Copyright 2015 by M. Matsuo.

I used NVivo for data, organization, and analysis. NVivo facilitates the storage, organization, search, and display of large amounts of qualitative data (Woods, Paulus, Atkins, & Macklin, 2016; Zamawe, 2015). I keep the software, together with the data files and the analytical memos reflecting my emerging understanding, on a password-protected laptop. I stored the hard copies of the informed consent forms, field notes, and data summary sheets in a locked drawer in my home office, together with the password-protected hard drive with the soft copies of the research documents, the interview transcripts, and the scans of collected information. I will destroy all primary research documents 5 years after project completion.

Data Analysis

I started my analysis by taking detailed notes during data collection. In case study research, data analysis begins early in the process and involves multiple iterations (Eriksson & Kovalainen, 2015; Yin, 2016). The purpose of qualitative data analysis is to provide a comprehensive description of the content and context of events and to develop a sophisticated interpretation of the emerging meaning of the phenomena under study (Eriksson & Kovalainen, 2015; Vaismoradi, Jones, Turunen, & Snelgrove, 2016). Qualitative content analysis involves an interest in an implicit and explicit content and context of events, whereas thematic analysis leads to a discovery and interpretations of the meaning behind reported events and interactions (Spencer et al., 2014; Vaismoradi et al., 2016). Researchers choose the type of analysis based on the research question and objective of the study (Eriksson & Kovalainen, 2015; Richards & Hemphill, 2018). The purpose of this study was to explore strategies managers used to encourage and facilitate teams' learning from experience. The data produced during a multiple case study design necessitate both within-case and cross-case analysis (Houghton, Casey, & Smyth, 2017) and contribute to the exploration of underlying patterns of events. I chose thematic analysis to work with the data in this study.

My data analysis followed a logical and structured process. In qualitative studies, the data analysis unfolds simultaneously with the data collection process (Spencer et al., 2014; Yin, 2016). When analyzing qualitative data, researchers follow a cyclic process of multiple iterations between the data and the data's representation, gradually moving from concrete to abstract (Spencer et al., 2014; Vaismoradi et al., 2016). A rigorous analysis

requires researchers to stay close to the data and demonstrate a systemic and logical path from data to conclusions (Spencer et al., 2014). In this study, I followed the five phases of qualitative analysis recommended by Yin (2016).

The informal part of my analysis started in the field while collecting data and writing field notes. I carefully organized my data in a case study database. Compiling, disassembling, reassembling, and interpreting data are the first four stages of the qualitative analysis process that ends with concluding (Yin, 2016). Detailed field notes add context, become part of the study data, and add to the quality of the findings (Houghton, Casey, et al., 2017). In the process of data compilation, I repeatedly reviewed my field notes, interview transcripts, and collected documents.

I disassembled data to generate codes. Codes are bits of data with identifiable labels attached to them (Vaismoradi et al., 2016; Yin, 2016). In thematic analysis, researchers can derive codes from theory, from data, or from a combination of both (Eriksson & Kovalainen, 2015; Spencer et al., 2014). Qualitative researchers use various type of codes: (a) conceptual, that reflect key elements of the phenomenon; (b) axial, related to connections between categories (Yin, 2016) or relationships between the elements of data (Eriksson & Kovalainen, 2015; Vaismoradi et al., 2016); (c) codes related to a participant perspective or a participant characteristic; and (e) process codes, describing interactions between concepts (Yin, 2016). The experiential learning theory informed my initial codes. The contemporary version of the experiential learning theory includes the description of antecedents and conditions for effective learning from experience in teams (Matsuo, 2015). For relational and process codes, I considered the

presence or absence of a positive or negative relationship between categories, as well as the direction of interaction between them. In my coding, I used contextual, perspective, and process codes. While striving to remain flexible and creative during coding, I kept detailed analytical memos of the process to create an audit trail for my study.

Reassembly of the data is the next step in the qualitative analysis process (Yin, 2016). In this step, I started with a conceptual map illustrating the system of codes from the most concrete codes to more abstract codes connected in categories. This method allowed me to look for patterns of data. Identifying themes that represent the most important patterns of data is the purpose of qualitative analysis and the main outcome of its third phase, which is reassembly (Richards & Hemphill, 2018; Yin, 2016). Themes represent patterns of interconnected categories of codes that relate to the research phenomenon (Vaismoradi et al., 2016). The development of themes from categories of codes supports the progression of analysis to a more abstract level (Spencer et al., 2014; Vaismoradi et al., 2016). In addition to mapping codes, I assembled and reassembled data in tables, matrices, and hierarchies looking for patterns to develop themes. To develop themes, researchers search for negative cases and alternative interpretations, build explanations and logic models, and run cross-case analysis (Eriksson & Kovalainen, 2015; Spencer et al., 2014; Yin, 2016). A detailed description of the theme development process contributes to the trustworthiness of research (Vaismoradi et al., 2016). I used the iterative, systematic process of theme development to create a solid analytical basis for the interpretation and completion phases of my analysis.

Interpretation of the data concludes the process of analysis and leads to the development of research findings described at the final stage of the project (Yin, 2016). Each phase of the data analysis process builds upon the previous one, facilitates better alignment of concepts, and brings about a higher level of abstraction and conceptualization (Spencer et al., 2014). To interpret data, researchers use three methods: description, description with the call for action, and explanation (Yin, 2016). To interpret my findings, I combined description and explanation, and I constantly traced the connection to the literature.

I used the conceptual framework selected for this study to compile the case database, produce codes, and develop themes. The connection to literature is important to maintain the credibility and trustworthiness of qualitative data analysis (Kihn & Ihantola, 2015; Yin, 2016). At the interpretation stage, I demonstrated how the themes emerging from the data related to the themes contained in the reviewed literature about organizational learning and the role of managers in overcoming barriers to learning from experience in the workplace. To start, I searched for themes related to differences in approaches to learning from successes versus learning from failures, looked for use of the developmental networks, challenging assignments, and approaches to increase positivity of experience. I also looked for any new themes emerging from interviews and documents that described participants' experience. Having summarized the themes and connected them to the literature, I described the practical implications and suggested directions for future research in the concluding phase.

The qualitative analysis involves sorting, indexing, retrieving, and interpreting large amounts of nonquantifiable data. To facilitate this process, researchers often use specialized software (Eriksson & Kovalainen, 2015; Paulus, Woods, Atkins, & Macklin, 2015; Yin, 2018). My conceptual plan for software included recording and transcribing software and a computer program for data analysis and organization. To record interviews, I used Zoom.us, which produces .mp3 and .mp4 audio files. I transcribed the audio recordings using Descript (for the first 2 cases) and NVivo Transcription (for the rest of them) and uploaded the transcripts to NVivo for storage and analysis. NVivo software is one of the most popular for qualitative analysis (Houghton, Casey, et al., 2017; Yin, 2016). Researchers use NVivo to store, sort, display, and process textual and visual data (Houghton, Casey, et al., 2017). An additional benefit of NVivo is its compatibility with EndNote (Houghton, Murphy, et al., 2017), which I used to store and manage my literature and citations. Although NVivo or other computer-assisted qualitative data analysis systems may have various functionalities for the efficient storage, processing, and management of large databases and may add to the quality of research by bringing consistency and enabling the creation of an audit trail, the systems cannot replace researchers (Spencer et al., 2014). Researchers are responsible for the analysis, findings, and rigor of a study (Houghton, Murphy, et al., 2017; Yin, 2016). My role at this stage of research was to bring a thorough understanding of the literature and the data using my strong analytical and interpretive skills**.**

Reliability and Validity

To establish reliability and validity in this study, I followed criteria applicable to qualitative research. Reliability and validity contribute to the academic quality of studies (Eriksson & Kovalainen, 2015). Qualitative researchers apply the concept of trustworthiness to ensure the robustness of their work (Marshall & Rossman, 2016; Morse, 2018). Reliability, which is a measure of the rigor of the scientific process in positivist science, corresponds to the constructivist principle of dependability used in qualitative research (Morse, 2015b; Patton, 2015). In addition, the combination of credibility, transferability, and conformability principles replaces validity, which confirms how accurately the study findings describe the research phenomenon (Eriksson & Kovalainen, 2015; Patton, 2015). To ensure the trustworthiness of my study, I implemented specific strategies to address the principles of academic rigor.

Reliability

My strategies for dependability related to the transparency of my research process. The dependability of qualitative studies involves a detailed description of the research process and recording the logic behind design decisions (Marshall & Rossman, 2016; Morse, 2015b; Patton, 2015). An auditable research process contributes to the dependability of studies (Eriksson & Kovalainen, 2015; Marshall & Rossman, 2016). To create an audit trail for my study, the case study protocol included taking detailed field notes of my actions and ideas emerging in the process of data collection and analysis. I included data and methodological triangulation and member checking in my case study protocol. Triangulation involves relying on multiple perspectives to clarify and deepen

the understanding of the research phenomenon by using different data sources, methods of collection, researchers, and theories (Eriksson & Kovalainen, 2015; Flick, 2018). Member checking, triangulation, and peer review are the three most recommended dependability strategies (Marshall & Rossman, 2016; Morse, 2015b; Patton, 2015). I used the member checking and triangulation dependability strategies in my study.

Validity

Researcher notes and the detailed description of the research process also added to the credibility of my study. Credibility strengthens the rigor of a study by demonstrating the connection between the research question, study design, findings, and research phenomenon (Marshall & Rossman, 2016). Member checking for data completeness and clarification of interpretation adds to the credibility of qualitative research (Morse, 2015b; Patton, 2015). This study includes my reflections on my role as a researcher and my personal experience with learning in organizations. A researcher's familiarity with the topics contributes to study credibility (Eriksson & Kovalainen, 2015; Kihn & Ihantola, 2015; Marshall & Rossman, 2016). Patton (2015) recommended considering alternative explanations and negative cases as additional credibility-building strategies. I included the search for negative cases and alternative explanations in my case study protocol. I described the process of data collection and analysis, the design decisions, and my attitudes toward the emerging codes, themes, and findings in my researcher journal. I also added a summary of my journey to this study document to strengthen its credibility further.

To support the external validity of my research findings, I followed the principle of transferability. The focus of qualitative research is on the deep understanding of specific cases in a particular context (Patton, 2015). The transferability of qualitative research demonstrates its connection to previous research in similar contexts (Eriksson & Kovalainen, 2015; Kihn & Ihantola, 2015). I addressed transferability by referencing my data collection processes, my interpretation of the data, and my findings to the modern experiential learning theory, which served as my conceptual framework. To address transferability, researchers should provide details on underlying theory and use triangulation to elaborate on its connections to the research question (Marshall & Rossman, 2016). The burden of establishing the transferability of study findings stays with future researchers (Marshall & Rossman, 2016). Purposive sampling and a rich description of the research setup are important to support transferability (Colorafi & Evans, 2016; Cypress, 2017). The detailed discussion of extant literature on the topic of learning in organizations, the case study protocol, the field notes and the research journal served as my strategies to increase transferability.

In this study, I followed the interpretive philosophy that posits the existence of multitude subjective realities. Confirmability establishes links between research data, interpretations, and findings (Kihn & Ihantola, 2015; Patton, 2015). The main strategies to address confirmability include a detailed description of the research process and mitigating researcher bias (Bratich, 2018; Charmaz, Thornberg, & Keane, 2018; Marshall & Rossman, 2016; Morse, 2018). I kept a detailed research journal and used analytic memos and member checking to address confirmability. The search for, and analysis of,

the negative cases and alternative explanations, as part of my research protocol, served as additional support.

To support the quality of my study, I maintained a focus on data saturation. Data saturation is the point in the research project when the inclusion of new data from additional participants does not add to the understanding of the research case (Tran, Porcher, Tran, & Ravaud, 2017). Data saturation adds to the depth of understanding and provides the breadth of data, which are both critical for ensuring the trustworthiness of qualitative studies (Morse, 2015c; Morse, 2018). Saturated data support the replication of categories, contribute to the completeness, and facilitate the categorization and conceptualization of findings (Morse, 2018). To add scope to my data, I allocated sufficient time for interviews and member checking. I conducted three additional interviews until I achieved data saturation.

Transition and Summary

In this qualitative multiple case study, I explored the strategies managers use to encourage and facilitate their teams' learning from experience. In Section 2, I described the methodology of my study to ensure research rigor. I explained the sampling strategy, discussed measures to ensure ethical research, and explained data collection, organization, and analysis processes. I listed the strategies to enhance the trustworthiness of the study process and results. In Section 3, I will describe the study findings, provide conclusions and recommendations for business practice and future research, and share my personal learning experience from the process.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative multiple case study was to explore strategies that managers use to encourage and facilitate learning from project teams' experience. I collected data from a purposive sample of seven managers from international companies who had more than 5 years of experience working on successful and failing projects. I used semistructured, face-to-face interviews; reviewed project documents; and analyzed companies' websites and press releases. The findings of the study revealed the following themes: (a) leveraging management processes, structures, and systems to facilitate learning (the processes); (b) proactive shaping of learning culture (the culture); and (c) continuous cultivation and role modeling of learning behavior (the self).

Presentation of the Findings

The research question of the study was "What strategies do managers use to encourage and facilitate learning from project teams' experience?" I found that the strategies used by participants fell under three overarching themes. The first theme, the processes, includes strategies of leveraging general management processes and systems (e.g., project management, human resource management [HRM] processes). Providing access to external learning networks and using various software systems to support learning are also part of this theme. The second theme, culture, encompasses strategies the managers used to shape the learning culture of the team to reinforce or mitigate the impact of the larger organization's culture. The third theme, self, identifies managers'

mind-sets and daily behaviors as an essential link between the processes theme and the culture theme. In the following sections, I will describe each theme in more detail.

Theme 1: Consistent Leveraging of Processes, Structures, and Systems

Theme 1 includes utilization of general management processes to maintain a constant focus on learning from unfolding experience. These processes included project planning and management, after-action reviews (AARs), social learning structures, and HRM processes. This theme also includes providing access to external learning networks and using various software tools that support learning.

Leveraging general management processes. The participants most frequently mentioned using general management processes, such as project management, change management, or strategy development, to encourage and facilitate learning from experience. While describing how he used a strategy development process for learning, Dennis called the strategy kick-off meeting a "good learning experience" because at the center of it there was a question: "did anything happen this year where we thought we were being successful, but we weren't, or successful in the new area that might change that?" In Falko's team, a growth and learning perspective was included in strategic project plan. In her team meetings, Magpie used the 3-year strategy discussion to invite her employees to use this opportunity to learn and grow:

> As a key leader on the team, where do you want to add your unique value? . . . where do you want to stretch? Where do you want to grow, where do you want to play where you're not playing right now?

Another general management process that participants used for learning was project management. While discussing one of her learning experiences, Megan mentioned that the project management software helped to control execution while she could open communication channels for learning:

> We were on Prince 2 at that stage, so we used a very robust project management methodology to keep on track of all with the right stations for all of the different work streams but still give people room for learning.

Overall, the participants mentioned that using general management tools for learning allowed them to maintain steady progress toward business goals while creating relevant and immediate learning from the team's experience.

After-action reviews. All participants used regular communication, progress reviews, project stage gates, and other elements of project management as tools for learning. However, the participants most frequently mentioned a specific project management tool as their go-to learning strategy: AARs (Dennis, Megan, Natasha), also referred to as postmortems (Falko, Libero), or post-project reviews (Vanessa). Participants shared that AARs could be either formal, followed by structured reports, or an informal brief such as an on-the-spot get-togethers. Dennis shared a structured report of a postmortem meeting with a focus on a strategically important initiative: a mergers and acquisitions strategy (see Appendix C). Additionally, Falko mentioned an internal survey taken by all employees directly involved in or affected by the project that contributed information to a project postmortem. The postmortem slide deck included a detailed review of the employee feedback together with project key performance

indicators. Several participants also mentioned less formal AAR formats: a "conversation about what happened" (Natasha), quick, on-the-spot discussions about "what went well and what could be done better" (Vanessa), or "informal feedback loop" (Libero) over coffee to discuss learnings and challenges.

The participants mentioned several important elements of an effective AAR, such as inclusion, creating a safe space, and dissemination of learning. Participants emphasized including people who participated in the experience, or were affected by it, because those people could bring invaluable information from the thick of the action. Dennis noted "[the] individual who was accountable and responsible should be the one saying … what went well and … what did not go well." Creating a safe space to encourage open discussion was also important to maximize learning benefits of AARs. Falko said it was important "to reduce social risks," and Megan indicated that separating a project discussion from a people discussion was significant because "You learn more from process discussion than from the people one. We focus too often on shooting people and [do] not look at the process."

Finally, to ensure that an AAR contributes to learning from experience, managers must share the resulting learning, conclusions, and recommendations within the organization and make it available for access later. Megan said, "We then take the learning . . . and feed it back into the central team. And then they make any kind of tweaks [and] adjustments from the lessons learned into the overall global process." Dennis also mentioned, "and then we generate lessons learned from that and we publish them across the group, and we had a presentation that documented all this, so this was

something that we consistently did in terms of reviewing major projects." When sharing does not happen, then learning is lost, and the team will go through the same experience and run into the same issue again: "We screwed up in one region and then we made exactly the same mistakes in another region because the two parts weren't connected" (Megan). Similarly, Falko said, "We constantly are relearning because we're not sharing that best practices."

Pre-mortems and in-progress reviews. Participants also mentioned premortems and in-progress reviews as specific strategies to encourage and facilitate learning from experience in teams. Falko defined premortems as a *strategy of inversion*, which are meetings that happen before a project starts to review potential areas of concern, apply learnings from similar projects, and develop the best possible course of action:

> Rather than wait until the end, let's do it up front. . . . Looking at a project. And going through and saying, okay, what would make this project a success? And thinking through those components. What would make this project unsuccessful? So now basically it's risk assessment. It's like, okay, so these 10 things could cause this project to not go well.

Libero used premortems to look at the project and discuss "how do we need to work together." Natasha used premortem sessions to develop a set of project principles for the team to use for more effective collaboration. Megan mentioned running "a kind of AAR" at every stage of the project.

The strategy of leveraging existing management tools for learning connects to the conceptual framework of this study. According to Matsuo (2015), one of the facilitators

of experiential learning on the job is critical reflection. Researchers have confirmed that managers use general management practices to support learning from experience (Frese & Keith, 2015; Klockner, 2017; Sitkin, 1997). The findings of this study illustrate how, by using the strategy design and review meetings, project management tools, and AARs, managers can create space and time for a team to reflect on the unfolding experience as well as extract learning from completed projects.

Empirical research has also confirmed the applicability of the strategy to use general management tools to support learning (Castaneda, Manrique, & Cuellar, 2018; Hotho, Lyles, & Easterby-Smith, 2015). A study of companies listed on the Nairobi Stock Exchange confirmed that, taken together, organizational learning and competitive strategy development had a stronger impact on business performance when applied in connection than they had when used separately (Sagwa, K'Obonyo, & Martin, 2015). Additionally, research on project management in uncertain and volatile environment has indicated that learning from experimentation positively contributes to a project management toolkit (Daniel & Daniel, 2018).

Further, researchers have confirmed the benefits of AARs, huddles (informal on-the-spot AARs), and project debriefs for business performance and learning (Allen, Reiter-Palmon, Crowe, & Scott, 2018; Trejo, Igel, Chuang, Bajaj, & Bernstein, 2019). Studies of fire department and emergency teams and local media newsrooms showed that AARs served to promote learning from near misses, increased satisfaction with the team's learning environment and helped teams to capitalize on learning moments (Cook

& Kautz, 2016; Crowe, Allen, Scott, Harms, & Yoerger, 2017; Quinn, & Bunderson, 2016). Findings from this study aligned with these research conclusions.

Social learning processes and structures. Another cluster of strategies used by participants was creating social learning processes: communities of practice, collaborative learning groups, and peer learning. Most of the participants managed geographically dispersed teams, so their social networking was virtual. In addition to virtual networking, managers created opportunities for their employees to frequently get together formally or informally over the phone (e.g., Magpie, managing a team of 1,000 across Canada) or during in-person meetings (e.g., Dennis, managing a team of more than 350 employees in four countries, and Megan, overseeing a 15,000-person business unit spread across the world). Magpie stated,

> We do have quarterly calls. There's like a practice. Part of those calls where people can bring case studies forward and we've asked [consultants] . . . to bring a sticky case forward that we all can kind of get into . . . [and discuss it to learn]. So yeah there's a more structured learning approach to that. . . . We hold that time spot for reflection for learning.

Falko also described a social learning project, where millennial employees joined an online learning group to benefit from the social aspect of learning from other professionals who go through similar experiences. Additionally, Dennis and Libero described using peer learning. Libero capitalized on the company practice of show-and-share meetings, where people learn from each other's work. Further, to support professional development and increase the chances of success of her project managers,

Megan created a buddy system to connect the new members on her team with more seasoned professionals within and outside it.

In addition to social learning processes, participants intentionally created social structures to trigger learning. Natasha created a set of team principles (see Figure 2) as a tool to "encourage reflection, empower questioning, and instill critical thinking" in her team while working on a challenging project. She also started a leadership book club to read and discuss books and TED talks covering topics connected to the challenges faced by her team. Magpie created a thought leadership initiative, in which she included the materials authored by the industry experts alongside those written by her team members, thereby promoting learning and collective knowledge creation.

Figure 2. Team's guiding principles (Case 7).

Using software tools to support learning. Various software tools facilitate social learning in large and geographically dispersed organizations. Participants mentioned

using project management software, business intelligence and data visualization tools, communication and collaboration platforms, and customer relationship management tools to create, store, and disseminate existing and emergent knowledge. Table 2 shows types of software tools used by the study participants.

Table 2

Software Tools Used to Facilitate Learning from Experience in Teams

Types of software tools	Examples
Project management	MS Project, PRINCE 2
Information sharing and data visualization	Intranet, microsites, Tableau, Power BI
Communication and collaboration	Microsoft Teams, Chatter, Survey Monkey, email
CRM software	SalesForce.com

Note. CRM = customer relationship management

The use of software to support learning in organization is widely researched, mostly under the category of knowledge management systems. Zouari and Dakhli (2018) demonstrated use of knowledge management systems to support the knowledge creation process. A study of manufacturing firms in Oman also revealed how face-to-face social networks and information sharing influenced knowledge dissemination and supported learning culture (Al Saifi, Dillon, & McQueen, 2016; Gil & Mataveli, 2017). Additionally, software tools such as intranet, e-mail, and online newsletters have supported cooperation in a small and medium enterprises network in Italy (Cerchione & Esposito, 2017; Esposito & Evangelista, 2016). Finally, a survey of enterprise social networking system users has demonstrated that such networks were an important contributor to organizational learning across industries and organization sizes (Qi & Chau, 2018). In line with research and the conceptual framework, the findings of this

study confirmed that social learning and related software serve as a powerful tool to support critical reflection, a facilitating factor outlined in the conceptual framework, and the three stages of experiential learning at work: concrete experience, reflective observation, and abstract conceptualization.

Human resource management processes. The participants were middle- and top-level managers in charge of multiple projects in a dynamic business context. All of them reported using a range of HRM processes to encourage and facilitate learning from experience. The participants mentioned challenging assignments, development plans, and using company training curricula to support learning. Several participants mentioned leveraging company mentoring programs to encourage learning.

***Challenging assignments*.** Learning from experience was at the center of this study, and many participants mentioned creating such learning via challenging assignments. These assignments usually involved novel tasks, "let's use your entire brain here" (Magpie), or stretch employee out of their comfort zone. In Megan's case, providing challenging assignments was part of her business strategy, as the company did not have enough qualified talent to service the fast-growing client pool:

> [for the new project] I'll probably have 30% of the team who have already got all of the requisite experience to deploy this time. The other 70% will be newbies that they might have a little bit of multi-country experience. But, you know, we're going to . . . give them the tools, the framework. We have a very . . . robust process that we use. But we're putting people on planes to go out and do something in Asia, and they've never been to Asia before.

The participants mentioned several elements that had to be in place to use challenging assignments effectively to facilitate learning from experience. First, people needed to be selected based on their learning agility and resilience, rather than based on skills and experience (Megan, Vanessa). Second, there had to be a robust support system, in terms of processes (Megan, Vanessa) and manager support (Megan, Dennis, Falko). Finally, to serve learning from the experience of challenging assignments, those need to be aligned with the assignees' personal motivations. "[When] people are on one of our project teams, they're giving up their life for about 6 months probably. . . .and it's really important to me to understand [what] does that person [want to get out of it]" (Megan). To ensure alignment, managers use individual development plans (Falko, Magpie, Dennis), performance management system (Libero, Megan), or informal conversations about personal development aspirations (Magpie, Falko).

The finding about using challenging assignments aligns fully with the conceptual framework of this study, as Matsuo (2015) included challenging tasks as one of the facilitators of experiential learning at work. Studies have explored how managers used challenging assignments to support learning from experience in their teams (Seibert et al., 2017; Zhou et al., 2015). Researchers have found that, combined with supervisor's support, challenging assignments encourage experimentation, reflection, learning from experience (Seibert et al., 2017), and develop organizational commitment (Cao & Hamori, 2016). A study of 223 organizations in India have described how stretch assignments help employees develop a variety of intra- and interpersonal skills that impact job performance (Subramony, Segers, Chadwick, & Shyamsunder, 2018). In a

study of professionals in France, Janand and Notais (2018) have established that developmental assignments help build professional confidence, develop new self-image, and change established practices and patterns of thinking. Researchers found that challenging developmental assignments help build competencies and character necessary to operate in challenging contexts (Sturm, Vera, & Crossan, 2017).

Mentoring programs. As participants described how they leveraged existing management tools to facilitate learning in their teams, they mentioned internal mentoring programs. Megan and Libero used existing programs. Magpie and Falko launched mentorship programs for newly hired consultants (Magpie) or emerging high-potential talent (Falko).

External learning resources and tools. Working in fast-growing organizations in dynamic environments, most participants reported the benefits of reaching beyond internal training curriculum for external resources to facilitate learning from experience in their teams:

> meeting people . . . peers, [who are in] similar situations in . . . completely different industries. . . [with] completely different backgrounds and being able to learn from them without always being in their little pool or network or team at work. . . . I think that's a great resource. (Dennis)

Such external learning resources included memberships in professional associations (Dennis, Magpie), supporting business networking opportunities (Dennis, Magpie, Megan, Natasha), and participating in online communities and learning groups (Falko, Libero, Vanessa).

In a direct connection to the conceptual framework of this study, the reported strategies of using challenging assignments, providing mentoring support, and reaching beyond their organizations' boundaries to encourage learning for their teams illustrate managers' efforts to create personally meaningful and business-relevant concrete experiences. Aligning people's developmental interests with business needs for effective challenging assignments connects to one of the facilitators of learning from experience, enjoyment of work (Matsuo, 2015). Finally, the strategies of using mentoring programs and other HRM systems, as well as that of opening access to external learning tools, connect to an antecedent of experiential learning at work (developmental networks) and contribute to the reflective observation and abstract conceptualization stages of the experiential learning cycle.

Studies of the impact of HRM tools on organizational learning have demonstrated relationship between development, performance management, and other HRM practices and the development of organizational learning capabilities (Hsieh, Chen, & Liu, 2019; Jain & Moreno, 2015; Zambrano, Pertuz, Pérez, & Straccia, 2019). Zhang (2018) has proposed a model to design incentives for knowledge sharing within an organization, while Prieto-Pastor and Martin-Perez (2015) have demonstrated that high-involvement HRM tools might support organizational ambidexterity by combining explorative and exploitative learning. Finally, studies have demonstrated that HR practices influenced organizational performance (Jeong & Shin, 2019; Jøranli, 2018).

Theme 2: Proactive Shaping of Learning Culture

The theme of proactive shaping of learning culture includes strategies aimed at shaping of the learning culture on the team level. These strategies included navigating organizational context to support learning culture, encouraging learning from both successes and failures, and creating triggers for learning.

Navigating organizational context. Based on the participants' perception of whether their organization's culture supported or hindered learning, they reported selecting a specific set of strategies for their teams. When participants viewed the larger organization's culture as conducive to learning (Dennis, Megan, Vanessa, and Libero), they used communication and collaboration strategies to empower learning from experience in their teams. In contrast, Falko, Magpie, and Natasha viewed their organizations' cultures as not supportive of learning; they described focusing on reducing social risks of experimentation and building psychological safety in their teams. Speaking of the importance of the larger organization's culture, Libero mentioned, "It needs to be instilled from the senior leadership and then it becomes the corporate culture. And fantastic things happen as a result." Vanessa noted the importance of top management paying attention to creating a learning culture: "If you want things to happen, or if you want to have a special culture . . . these topics have to have [top managers'] attention. If they don't have your attention, it won't happen."

Dennis and Vanessa, both being chief executive officers (CEOs) of their organizations, highlighted critical importance of positioning learning as a core competence and the "success factor" (Vanessa) of their organization. Both emphasized

continuous communication of the value of learning during staff meetings, townhalls, and strategy reviews. Dennis stated: “Let’s establish . . . [learning] as a value. In the organization that we want [to be], we want to do better. . . . Got to be a cultural thing there.” Vanessa focused on communicating the company’s learning culture during recruitment fairs, at the industry events, and in corporate communication: “We learn from each other, exchange ideas, work in teams, enjoy working, and are interested in people” (X Company AG, corporate website, Case 4). Megan and Libero, who were business unit managers, focused on leveraging their respective companies mission statements, corporate values, intracompany learning opportunities, and the nature of the industry to promote, maintain, and keep focus on learning in their business unit.

Although the conceptual framework of this study did not include learning culture as a separate element, the findings of this study indicate a potential connection between the elements of a learning culture and the LGO (an antecedent of learning from experience), and two of the three facilitators: enjoyment of work and critical reflection.

Empowerment to learn. Participants described that promoting learning as a business-critical element and as a corporate value, was one of the strategies to empower people to experiment and to share their experience. “You have to promote a culture and a value that learning is what we do on the job . . . . Value around learning is critical” (Dennis). Participants stated that organizational learning becomes a critical element of strategy for a fast-growing business (Megan), a start-up (Vanessa), or a company entering new markets (Dennis).

> If you trust them, if you put the right person in [the] role . . . they got to make a judgment call. . . . they go . . . outside of the guidelines. That's fine. . . . and when they then let you know, and it's all good, and they don't get punished for it, then they tell somebody else and then . . . then you end up with a team of people who actually feel in a much better place. (Megan)

The organization needs to "learn its way into it" (Megan), and the management needs to understand that "you don't have to figure out something smart to do, you just have to figure out what works" (Dennis).

All participants mentioned working to create more communication opportunities and to encourage learning from experience in their teams. In most cases, team environments that were supportive of learning had open and balanced communication. Focusing on communication, Megan insisted on having a "no-surprises rule." Libero, Falko, and Dennis spoke about making sure to dedicate equal attention to discussions about positive and negative experiences. By using informal communication channels, such as ad-hoc small group reviews (Dennis, Falko, Natasha) and one-on-one meetings immediately after an event (Libero), managers created constant opportunities for the employees to learn from experiences in a less risky context.

> I think if you want to promote learning an organization, you have to promote a culture and a value that learning is what we do on the job. It's okay to learn, get better. . . . you don't have to show up with all the skills, . . . you have to show up with the right attitude . . . You need to have certain skills to come, but you can

> develop yourself and learn on the job, learning new things and concepts . . . Value around learning is critical. (Dennis)

In contrast to the participants who reported operating in organizations focused on learning (Dennis, Megan, Vanessa, and Libero), Falko, Magpie, and Natasha perceived that the senior management of their respective organizations prioritized other things over learning. These participants described choosing strategies intended to build safety and trust and to reduce the psychological and social risks of failure in their teams.

Building safety and trust. Building psychological safety and trust in teams was an important strategy of managers leading teams in organizations that, at the time of the research, did not focus on learning. Falko mentioned positioning post-mortem reviews as "rankles and nameless." Natasha shared, "within the purview of my team I really try to . . . [build] the culture, where people feel like they can trust each other." Magpie spoke about "letting them feel like it's actually a really safe place to learn and . . . where they can tell me whatever they need to tell me." Speaking about the critical elements of her strategies to encourage and facilitate learning from experience, Natasha said that "people have to believe that [it is safe to experiment] not just about me as their leader, but each other as peers and colleagues, that we've got each other's back."

Even in organizations with learning cultures, the reality of business operating in volatile, uncertain, complex, and ambiguous (VUCA) environment demanded from managers to focus on creating a safe space for the team to acknowledge when they faced issues and to ask for help.

> A big part of my job is being [a] backup for my team. So, either they know in advance that they need help, or something [in the project] goes wrong and they need help, and we figure out how to do it. I think that's probably the main work for all of us [in management]. (Megan)

Participants mentioned that lack of safety and trust increased social risks of openly discussing experiences, thereby hindering learning in the short- and long run. Speaking about such an AAR meeting, Falko shared:

> [it becomes] *a murder board,* you know, you're just out there and just being drilled, . . . it's an inquisition. So that would be . . . the worst-case postmortem . . . because then the learning becomes, "Well, I have to be very protective, not sharing." And it creates a different learning from it, which then has an impact on the business, which then has an impact on culture.

All participants mentioned that in an atmosphere of trust people open up, offer more information, and take out more learning: "they have the same opportunity to admit they're wrong, and to demonstrate what they've learned from it, and move on in a way that is not punitive or detrimental to them in their careers" (Vanessa); "everyone wants to be treated in a way that you feel accepted, that you feel valuable, that you feel like someone who is contributing to . . . the results" (Natasha). Similarly, Dennis spoke about culture of safety and trust as the key element of successful learning from experience. Finally, Vanessa mentioned that, in a start-up in a new industry, people need to be "ok with" any outcome of experimentation.

Reducing social risks of failure. Related to building psychological safety, participants reported the work to reduce social risks of failure in their teams. Describing his approach to establish the "no fear [of failure]" rule in his team, Libero recalled a post-event conversation: "It's OK to fail, and we all know that. . . . That [is] . . . the team culture. If we fail now, we know how not to fail next time." Natasha mused, "in an ideal situation, you encourage people to fail, and to fail fast because then they've identified the options that don't work." To reduce the risks of failure, the managers needed to demonstrate tolerance to failure and declare it part of the company culture. In Dennis' case, his company considered acceptance of failure to be their competitive advantage, as they worked together with clients so "they can make mistakes and know that we will collaborate to correct and adjust as needed" (Company Y, internal strategy document, Case 2).

In addition to declaring tolerance to failure as part of the corporate culture, leaders need to role model it. "Mistakes are allowed. And if you as the manager are acting like this. . . then everyone could do it and would do it" (Vanessa). Megan named tolerance to failure a key differentiator of a successful global project manager: "When I see leaders that fail, I think the biggest [mistake that they make] is that they don't give people the freedom to make mistakes." Finally, all the participants of this study spoke about the need to limit social risks of failure to allow for experimentation that would lead to the experiences that feed the learning.

Learning from both sides of the experience. While discussing learning from experience, the participants underscored the importance of looking at "both sides of the

experience" (Libero) to learn from both successes and failures. Most participants mentioned that to learn from both types of project outcomes they used the same processes: AARs, progress reviews, regular meetings, and learning. Magpie and Natasha mentioned that, in an organization that does not accept failure as an option, encouraging employees to learn from failure could create a challenge for the team managers. Participants spoke about strategies of focusing on facts, as a matter of ensuring "communication hygiene" (Natasha); role modeling fallibility (Magpie, Natasha), and promoting the belief that errors are part of the process (Magpie, Megan, Libero, and Natasha). Some of the barriers that managers needed to overcome to allow for learning from failure were the lack of willingness to discuss failures (Dennis, Megan) and shutting off the negative emotions (Falko) associated with failure experiences (Libero).

While most of the participants observed that failure experiences had higher potential for learning, all of them suggested that learning from successes had its value and brought about its own challenges. The first challenge was that people were less interested to discuss successes than failures: "everyone would simply say, 'It was successful" (Vanessa). Falko shared a similar opinion, "Sometimes when things are going well . . . it can be easy to skip it." Even when his employees were happy to engage in discussing successful projects, Dennis noticed the risk of having a superficial discussion, where "you fail to recognize . . . the role of luck, and good timing, and stuff like that." To encourage learning from successful experiences, participants used special approaches to frame discussions around details of the event.

> Let's not have superficial discussions! If that's your attitude and your culture, then you'll get into [successes] a little bit more and say, Hey, we really want to learn from this! . . . we have to use this . . . next time, so [if] we don't have a good meaningful discussion, we're not going to take anything away from [this experience]. So, again back to the culture of rigor and professionalism. (Dennis)

The second challenge is to remember to leverage positive emotions and the sense of team efficacy that follow successful experiences. Participants mentioned that "you have to celebrate success" (Libero). Falko included actions to celebrate "Everyday Heroes" in his project deployment plans (Company Z, project presentation deck, Case 1). Magpie mentioned leveraging creative momentum post-successes "to say . . .wouldn't it be cool if we do this again? I'd be good! So, let's find the pieces that we need!" Besides motivating continuous improvement and fuelling creativity, celebrating successes contributes to building trusting relationship in the team, so they know "that we do have . . . a higher purpose that we're trying to achieve" (Natasha).

Matsuo (2015) did not discuss culture in the framework that I used as a conceptual framework of my study. However, the interest in the topic of culture as a critical factor to promote organizational learning is increasing. Studies have explored the importance of organizational culture for learning (Catino & Patriotta, 2013; Pokharel & Choi, 2015). Researches have studied how managers build a learning culture, which refers to a culture that focuses on promoting individual learning and transformation via communication and collaboration (Rebelo & Gomes, 2017; Xie, 2019). Some researchers have established the role of organizational learning culture as an essential driver of

organizational performance (Overstreet, Skipper, Huscroft, Cherry, & Cooper, 2019; Rebelo & Gomes, 2017). The strategies discussed by the participants of this study, connect to the research findings that demonstrated that managers used many formal communication channels, such as team forums, pulse meetings, and team bulletin boards, which helped establish an attitude of error reporting that supported a culture of reliability (Simonsson & Heide, 2018). In addition, researchers have established that team learning helped teams to generate shared goals and create shared strategies (Boon & Dochy, 2016). Most of the communication and engagement strategies described by the participants of this study related to promoting team cohesion and team learning. Tekleab, Karaca, Quigley, and Tsang (2016) have confirmed that the degree of mutual and collective interaction within a team contributed to team learning that influenced the relationship between team cohesion and team performance. Finally, Rong, Li, and Xie (2019) confirmed that, leaders might help resolve team conflicts, promote team cohesion, and support team learning and creativity by creating and adjusting team processes.

Strategies to create psychological safety and trust serve to encourage the two stages of experiential learning at work, concrete experimentation and reflective observation. These strategies connect to the research on the importance of psychological safety discussed in the literature review. Edmondson (2019) defined psychological safety as a climate where employees feel safe to take interpersonal risks by openly sharing their ideas or concerns. Researchers continue to support the importance of psychological safety in teams for team learning (Carmeli & Dothan, 2017; Edmondson, 2019; Edmondson et al., 2016). In addition, researchers have established that psychological safety mediated a

positive relationship between leadership and learning in teams (Albritton et al., 2019; Stephens & Carmeli, 2016). Finally, Edmondson (2019) summarized leadership approaches to establish psychological safety in teams that included creating forums for sharing information and providing guidelines for a discussion to focus on facts. The strategies used by participants to create triggers for learning in teams relate to these recommendations.

Theme 3: Continuous Cultivation and Role Modeling of Learning Behavior

All seven cases demonstrated that without active involvement of managers, whose mindsets and daily behaviors shape learning culture through intentional application of various management processes, it would be difficult for teams to create learning from experience and apply such learning in their daily operations. The third theme, the self, serves as a connector between the culture and the processes themes and includes keeping learning as part of managers' daily agenda, cultivating managers' learning mind, investing time for developing self and others, and choosing coaching as a preferred leadership modality.

Learning is "part of a leader's agenda." When discussing critical elements of their strategies to encourage and facilitate learning from experience, the participants mentioned that learning should be "part of a leader's agenda":

> [T]o promote learning . . . sometimes you have to push people and you have to do that by . . . really making it a priority for them, to fit this into their job, and [to] remind them and celebrate their successes and development as teams and organizations. (Dennis)

Vanessa underscored the importance of keeping learning in the focus of management's attention. To keep learning at the top of her team's agenda, Natasha continuously reiterates the "permission to learn."

Such a permission to learn, or a sense of management attention on learning is often a result of the manager's conscious internal work that creates a strong and visible positive attitude toward the importance of learning: "I have to stay on top of it and focus on [it]. As soon as I don't do that . . . whirlwind takes over all the other stuff we're doing" (Falko). Such a strong focus on learning finds its reflection in the daily actions and behaviors of managers until it "becomes ingrained" (Falko) in their teams' ethos. To illustrate the daily behaviors participants mentioned providing support and backup to the employees while on challenging assignments (Megan, Natasha); investing time to build relationships: "until we are replaced by artificial intelligence, [personal relationships] will continue to play a major role in how people learn" (Libero); and, giving "feedback in a way that the people feel valued" (Vanessa). Creating triggers for learning, discussed in theme 2, also worked as reflection of the manager's focus on learning. According to the participants, in order to elicit an effective and authentic action from their team members, the focus on learning needs to be a reflection of the growth mindset of a manager.

Cultivating learning mind. In line with the conceptual framework and the empirical studies on the topic, the participants spoke about the importance of managers' LGO. "You want to have a growth mindset. . . want to get better" (Dennis). As she was reminiscing about her professional path towards starting to build her start-up company, Vanessa noted that learning from experience was important for her:

> And this is how you learn - when you do it . . . . You can't avoid making mistakes . . . you kind of want to [walk the path] and then look back and think, '[what would I do] differently if I would do it again'. . . . And I'm, personally, I'm enjoying it - to learn from . . . experience.

Manager's LGO finds its reflection in the company mission and values (Dennis, Vanessa), becomes part of projects and programs the manager launches (Falko), stays at the center of the manager's interaction with their teammates (Libero, Magpie), and even transpires into the bold decisions manager takes in relation to projects and people involved in them (Megan, Natasha).

Managerial courage was one of the most frequently mentioned manifestations of the managers' LGO in action. "There is some bravery attached to it. And a willingness to admit I was wrong" (Natasha). For Megan, managerial courage is what makes her and her team successful, "when you take risks on people they are going to screw up and make mistakes. Because they don't know everything. So, you've got to be prepared to allow them to beg for forgiveness rather than micromanaging." Libero, whose team was responsible for adaptation of the company action plans in a very volatile and competitive market, admitted: "I have to be the first to acknowledge the failure and take the blame." A strong LGO demonstrated by a manager set in motion the experiential learning cycle in the team and kept the team focused on extracting learning through reflection, adapting or creating new strategies: "It's not a straight line at all. . . . It's figuring out [what] are the next [steps]" (Magpie)?

Finally, the participants described how the manager's LGO reinforced the teams' LGO and supported learning from experience by positioning daily work experiences as a source of new solutions. Megan told a story about a project deployment in a European market that was a painful failure. As a manager, she had to "protect a lot of people" and "calm down the client" so the they could work together to analyze the unsuccessful deployment and address all the issues. In addition,

> We've been able to use some of the experience that the team gained in fixing client number one and migrated [it] to client number two in a completely different geography with very similar issues. And we've done that by remote support . . . and [we've] been able to directly lift and shift a lot of the best practices from the European market and just drop it straight into the North American company. So . . . It was an expensive mistake for us in Europe. and it cost us a lot to fix it, but it really accelerated what we fixed in North America. (Megan)

In the process, Megan's team created a new project deployment tool that became part of the company approach globally. "People now want to see this tool and . . . and it was all born out of a horrible mess" (Megan). Other participants told similar stories where their supervisor (and themselves later in their careers) role-modelled LGO in the aftermath of an experience; when, after a failure, they skillfully moderated their own emotions and compassionately held the emotions of others (Falko, Vanessa); displayed courage and bravery during a post-mortem discussion (Megan, Natasha); lead the team through a candid AAR (Dennis, Vanessa); and held the team together by focusing on building connection and team efficacy (Magpie, Libero).

According to the participants, to cultivate learning mind in self and others, managers need to role-model transparency and vulnerability around experimentation and learning. Natasha spoke about the importance of manager's transparency:

> for a manager to truly be good at encouraging learning, they've got to model it, they've got to be brave, they've got to be willing to show what they've learned, and how they've learned that . . . and sometimes that means admitting your own failures. And . . . I think that's key. And unless you're going to be a dictatorial , you know, 'do what I say' kind of manager, which I don't think works to be honest, you've got to be brave, you've got to be willing to be vulnerable and admit times that you failed because that's what makes it safe for your team [to fail].

Vanessa described her work to align her value for learning and corporate culture, "I allow myself to make mistakes and I talk about it. . . . In our management meetings we . . . talk about [it]. All the time." Coming from the manager's life experience (Vanessa), being part of their consciously created value system (Falko, Natasha), or learned from mentors and supervisors early in their career (Dennis, Falko, Megan, Libero); the interest in experimenting and the confidence to admit own fallibility added credibility to the participants' efforts to shape learning culture in their teams and allowed them to effectively support the development self and others.

Leader as a developer. Speaking about what it takes to encourage learning from experience in their teams, the participants discussed how they used their own experience to develop themselves. Most of them reported consciously investing into their self-development and on-going learning (Dennis, Falko), taking regular care of their

physical, emotional and psychological needs (Magpie, Vanessa, Megan), working with an executive coach (Natasha), maintaining broad interests and hobbies to keep an open mind and fuel their curiosity (Libero).

The participants' accounts illustrated their belief that providing people with developmental opportunities "to learn and experience new things" (Natasha) must be at the center of managers' job. As Megan put it, "Our job is really to help them grow and catch them when they fall." She continued:

> [What] I'm most proud of [is] some of the people that I've plucked out of where . . . they were completely going nowhere, but they were superbly talented [and] they just haven't figured out . . . where their spot was. (Megan)

In addition, participants described their investment of time to develop others by considering people's personal developmental interests when planning job assignments (Magpie, Megan), searching for learning moments (Falko, Dennis), empowering people to "question things" to encourage on-going learning from projects (Natasha), using external and internal communication opportunities to promote the importance of learning (Libero, Vanessa).

Choosing coaching approach. One of the strategies to cultivate a learning mind in self and others mentioned by participants was to use questions to spark conversations about experiences.

> If you're approaching it from a coaching standpoint, from a Socratic method standpoint, you're giving [a] tacit permission . . . to say 'why?' And often I think it's [that] ability . . . that gets the team to a more successful outcome. (Natasha)

For some participants coaching was just “having a reflective conversation” (Magpie), building the “critical reasoning ability” (Natasha), or creating “learning moments” (Falko). Others discussed a more deliberate effort to start coaching their teams. For example, Dennis described successfully using the *coaching ourselves* framework by H. Minzberg (www.coachingourselves.com) to facilitate learning from experience in his team.

> [T]he concept was [that] you could take a subject and just print out PDFs, and nobody had to prepare for it, and nobody had to teach it. You just need one person to facilitate and you could sit around in an hour and learn something . . . Everybody [would] open the PDF at the same time, and [would spend] an hour. . . talking about a certain concept, giving their experience with that concept, questions, exchange of information . . . People could do it at lunch time or people could take one hour or so. . . . You didn't have to go off-site. It was right there at work. And the idea was . . . coaching ourselves, learning from each other, rather than going to a consultant, or a class, or a MBA program, or something like that to learn something. You could learn a lot by just . . . being exposed to simple ideas - strategy, sales, and reviews. (Dennis)

Similarly, Libero spoke about using series of questions to lead a learning conversation post-event. Megan described role-playing with her subordinates to instill the habit to share problems and to ask for help. When prompted to share her opinion about effectiveness of using coaching for learning, Vanessa admitted that “one of my biggest learnings as a manager was that the most challenging part of management was not to

solve problems [for people], they will not learn anything. They learn by finding solutions themselves, [guided] by [manager] asking them ‘What would you do?” (Vanessa)

Participants mentioned three main ways how coaching by managers encouraged and facilitated learning from experience in teams. First, by using a coaching approach managers trigger employees’ exploration of experience: “coaching provides that framework where it's ok to explore” (Natasha). Second, when managers use coaching, they empower people to experiment and learn (Dennis, Falko, Vanessa). Finally, coaching by managers helps create a supportive learning environment (Falko, Libero, Magpie, Megan, Natasha). Several participants stated that coaching skills were essential for managers to more effectively encourage and facilitate learning from experience on the job. In his company, Dennis included coaching and mentoring in the personality assessment used to hire and develop managers. Natasha put her whole team through coach training. Falko described a simple coaching framework that he extensively used himself and trained all his people managers to use; “The ELA model: What was the experience? What is the learning? What's the application? And that works so incredibly well, we've ingrained that into all of our programs. So, we're teaching that as a skill.”

The findings of this study directly connect to the conceptual framework, which indicated that learning goal orientation in both managers and teams was one of the antecedents of learning from experience at work and that managers’ behaviors needed to connect to all four stages of the experiential learning cycle, concrete experience, reflective observation, abstract conceptualization, and direct experimentation (Matsuo, 2015). In my literature review, I discussed sources that described how leaders’ behaviors

shape organizational behaviors that encourage and support learning (Fillion et al., 2015; Pedler & Burgoyne, 2017; Weick & Sutcliffe, 2015). Researchers have established that front-line managers' LGO enabled learning in hospital teams (Ellström & Ellström, 2018; Matsuo, 2019), and supported mentees self-efficacy in the workplace mentoring programs (St-Jean, Radu-Lefebvre, & Mathieu, 2018). CEO's LGO had positive effect on organizational ambidexterity in small and medium enterprises (Mammassis & Kostopoulos, 2019; Xiang, Chen, Liu, Zhou, & Xing, 2019). In addition, research has demonstrated a strong relationship between teams' LGOs and achieving project goals and developing relationships (Chen & Lin, 2018). Matsuo (2019) has noted that employees' LGO could be enhanced by managers' efforts to set goals, coaching, mentoring, and encouraging participation in professional development. Managers' focus on personnel development facilitated employees' learning in a variety of contexts in Swedish industrial companies (Wallo, 2017). Emby, Zhao, and Sieweke (2018) have found a direct positive association between managers' transparency around fallibility and the readiness of the employees to openly discuss failures. Some researchers have established that managerial coaching positively correlated to employees' thriving at work (Raza, Ali, Ahmed, & Ahmad, 2018) and facilitated employee learning (Dawber, 2019; Matsuo, 2018). Finally, studies showed a connection between managerial coaching and employees' in-role behaviors (Huang & Hsieh, 2015), its direct impact on employees' perception of manager's trustworthiness (Kim & Kuo, 2015), and its positive influence on efficiency of internal processes and employee motivation (Zuñiga-Collazos, Castillo-Palacio, Montaña-Narváez, & Castillo-Arévalo, 2019).

Application to Professional Practice

The findings of this study apply to professional practice in several ways. The findings of this study demonstrated several strategies managers used to encourage and facilitate learning from experience in teams. These strategies included leveraging existing managerial processes, shaping organizational culture, and continually role-modeling learning behavior. The study illustrated how existing managerial processes support learning from experience at work. Strategy development, project management, HRM processes and business software tools could help to document the direct experience, support critical reflection, and facilitate developmental networks. By applying the findings of this study managers may find it possible to streamline their portfolio of learning tools and increase the effectiveness of learning initiatives by ingraining learning in the daily business activities. Such strategies could help smaller and more cost-conscious organizations to optimize their training and development budgets without limiting their ability to increase competitiveness by learning from experience.

Another application of this study includes a more disciplined approach to running the AAR meetings to encourage discussion of the factual side of the experience in an atmosphere of trust, focusing on processes, not assigning blame, and separating project analysis from performance reviews. Also, based on the findings of this study, managers and human resource practitioners may consider more structured planning of job assignments to ensure a better alignment of business objectives and personal goals of employees. Finally, managers could learn from this study to structure more meaningful

and rewarding assignments by providing ongoing support and encouraging coaching by supervisors.

In line with the existing research on multilevel organizational learning, the findings of this study illustrated that the presence and strength of the focus on learning in a larger organization has an impact on the ability and effectiveness of the team manager's efforts to encourage and facilitate learning from experience in their teams. By leveraging the strategies described in this study, senior management may benefit from investing time to consider how learning from experience contributes to the success of their business and to formulate a corporate culture that includes learning as one of values and desired behaviors. Team managers might benefit from the results of this study that demonstrated that paying equal attention to learning from successes and failures lead to perception of increased psychological safety in teams, contributing to a culture of learning. By introducing structured meetings, motivating fact-based discussions, and leveraging positive momentum post-success, managers may increase the depth of learning from successful experiences. At the same time, running more structured AARs, working to decrease social risks of failure by positioning it as part of learning, and role modelling fallibility, managers may enable and deepen learning from failures and contribute to building a more risk-tolerant culture conducive to stronger innovation and competitiveness.

Finally, the results of this study suggest that when leaders are more conscious about the impact of their actions and intentionally role-model learning behaviors, they find more effective ways to navigate the cultural context of their larger organizations and

to apply existing managerial processes to encourage and facilitate learning from experience in their teams. In line with the conceptual framework, this study provided evidence that managers with a strong growth mindset combined with managerial courage and coaching approach can successfully support their teams to learn from experience in a VUCA environment.

In addition, managers could benefit from the results of this study by deciding to allocate more time and energy to developing their LGO and by creating conditions to strengthen the LGO of their teams. Training and leadership development professionals could apply the findings of this study to offer more practical training on the leadership skills necessary to operate in a VUCA environment. Another application of these study results could be the inclusion of coaching skills training in the training curriculum for managers. Providing support to team managers by offering them coach training, as well as access to team coaching tools and external team coaches, may be helpful to encourage learning from experience in teams.

Implications for Social Change

The findings of this study may contribute to creating conditions for ongoing learning on the job. Research has demonstrated that learning at work contributes to employees' performance (Dekoulou & Trivellas, 2015), satisfaction (Iliopoulos, Morrissey, Baryeh, & Poliozys, 2018; Lubis, Dalimunthe, & Siahaan, 2019; Malik & Kanwal, 2018), and engagement (Islam & Tariq, 2018). Implementing strategies outlined in this study may lead to creating a culture of ongoing learning, engagement, and self-efficacy. By creating conditions to learning on the job managers can potentially

strengthen job embeddedness that leads to retention (Kanten, Kanten, & Gurlek, 2015; Ma, Mayfield, & Mayfield, 2018) that may contribute to more stable employment and improved employee well-being.

Research has demonstrated that employees that are happy on the job demonstrate better productivity, higher income, stronger pro-social behaviors, and subjective well-being (Bakker & Oerlemans, 2016; Maccagnan, Wren-Lewis, Brown, & Taylor, 2019). Well-being supports employees' self-determination and resilience (Bakker & Oerlemans, 2016). Enabling learning on the job through the strategies discussed in this study may contribute to employees' sense of well-being and self-efficacy, as well as improved competitiveness of businesses and organizations. Happier people and more competitive businesses may support more stable and prosperous households, as well as more vibrant and sustainable communities.

Recommendations for Action

The findings of this study lead to several recommendations for action. First, supervisors should seek opportunities to use the management processes to encourage and facilitate learning in their teams. Project management, strategy development, talent development, and software tools create opportunities and support for critical reflection, conceptualization of learning from experience, and sharing lessons for immediate implementation across the organization. Second, to support organizational learning, senior managers may consider positioning learning as a company value and creating an atmosphere of psychological safety. Paying equal attention and applying specific strategies to learn from successful and failing experiences could help to achieve that goal.

Based on the findings of this study, the leader's growth mindset is a potential catalyst for synergy between management processes, software tools, and company culture in support of effective learning from experience. One recommendation is for managers to allocate more time for building their learning capacity, developing growth mindset, and acquiring skills necessary to demonstrate courage to experiment, tolerate failure, and address related psychological reactions in employees and teams. Another recommendation is to invest time in developing others and to use coaching to facilitate learning from daily experiences.

When selecting and introducing HRM processes and tools, the human resource managers may need to include support for the creation and sharing of learning as a critical function of such processes. Another recommendation is to train managers to improve skills for fostering learning, creating psychological safety, and coaching. In addition, management development professionals may consider making external executive and team coaching broadly available for the managers to help them support learning from experience. Finally, encouragement for learning from experience and people development may become evaluation criteria for performance management and rewards systems.

Upon completion, I will share the results of this study with the participants and offer to present the summary of findings to their management teams. I plan to disseminate the findings of my research by speaking at management and leadership development conferences. In addition, I intend to publish blog posts in leadership

development communities in social media and articles in trade magazines and academic journals.

Recommendations for Future Research

This study has several delimitations that future research may address. First, the sample size was delimited to seven managers from multinational organizations. Future research could include a larger sample, potentially constructed to represent managers from different cultures. Second, the unit of analysis of this multiple case study is a manager, which adds the risk of self-reporting bias. Future studies may follow a mixed-method design and include surveys of team members to provide a more holistic view and validation of the effectiveness of the strategies to encourage learning. Future research may follow up on the findings regarding the difference between the strategies to encourage learning from failure and learning from success. Additionally, research of the difference in managerial strategies in teams that work in learning organizations versus. those working in organizations that do not prioritize learning could provide additional insights on how managers can encourage learning from experience. Finally, a longitudinal study of team learning from experience before and after the implementation of a focused strategy may help to deepen understanding the topic of learning from experience in teams.

Reflections

At the start of my doctoral research, my goal was to discover applied strategies to encourage learning from experience and to produce a piece of novel research that I could share with my clients and students. Almost 4 years later, I am reflecting on my

experience with a profound sense of accomplishment and gratitude. I am also quite surprised to see that the process of my doctoral study has not been what I expected, and the outcome of it differs in essence and scope from anything I had imagined.

I anticipated the process to be challenging, but I could not imagine that the most time-consuming and challenging part of it would be the interpretation and description of the findings. One of the preconceived ideas I had was that it would be difficult to find participants and to encourage them to openly share their experiences. Much to my surprise, I received response from more prospects than I could manage. During the interview and documents collection process, my participants were very open, collaborative and provided me with rich and thick data on the topic. Our interviews and member-checking calls become brilliant conversations that inspired me to share my findings and served the participants by creating a pause to reflect on how they lead their teams and themselves.

During data collection and analysis, I had to manage several biases and preconceived ideas. As a business leader, I have had a bias for action and achieving results, and I expected to hear about strategies as sets of plans, actions, and measurement processes. Cognizant of such bias, I set up my research process to focus on the interview guide (Appendix A), taking field notes and keeping a reflective journal. Bracketing my experiences, opinions, and reactions helped to collect high quality data and focus on what the participants considered important, and not on my opinions and interpretations. My experience with the research process complemented the data that demonstrated that being

present to a broader context and staying conscious of the impact of one's attitudes and behaviors was as important as implementing specific actions and tools.

As a result, in the process of data collection and analysis I discovered the power of reflexivity. As a researcher, business leader, and consultant, this is perhaps the most important outcome of the doctoral research process. My choice of constructivism and a qualitative method as my research paradigm served me enormously. I am grateful to my chair and my participants for helping me realize the importance of one's impact on others. Being conscious of one's impact, be it a researcher interacting with the participants, manager working with the employees, or educator engaging with the students, makes a difference in the process of collaboration and the quality of its outcomes. I plan to make reflexivity in leadership a focus of my future research.

Finally, I am becoming a scholar-practitioner, a role I am happy to claim with confidence. I have become a better writer – a transformation that started at the Walden doctoral writing intensive in November 2017. With patient encouragement of my chair and my classmates, this transformation continues through my practice with the doctoral, business, and social writing. Most importantly, my focus shifted from *creating my own unique* research to becoming a *part of a scholarly dialogue* on learning from experience at work. During the literature review and research process I discovered the wealth of theoretical and empirical research on the problems that business practitioners face every day. As a scholar, I see my role as a bridge between the world of academia and the world of business, the role I feel ready and honored to assume. Working on my doctoral research strengthened my desire to promote learning, reflexivity, conscious relationships,

and mindful action. This desire will shape my thinking and my work after completion of my study,

Conclusion

This study contributes to the literature on organizational learning. The ability to learn from experience is critical for an organization's performance and contributes to stronger employee engagement, retention, and sense of fulfillment. This study explored how managers can encourage and facilitate learning from experience in teams. The findings of the study illustrate the synergy between several strategies: leveraging general management processes and software tools, navigating organizational context to shape the learning culture, and focusing on developing people by role-modeling growth mindset. Such a synergetic approach works to build learning capabilities in teams across organizational contexts in a variety of industries and markets. By intentionally combining the strategies described in this study, managers may improve learning and adaptability of their teams and contribute to the growth and development of the people and communities around them.

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Appendix A: Interview Guide

Managerial Strategies to Encourage Learning from Experience

Introduction.

1. Thank the participant for their agreement to participate. Explain the informed consent, voluntary nature and the process of withdrawal. Q&A

5 min

2. Explain the purpose of the study, the potential contribution to business practices and social impact.

5 min

3. Describe the interview plan and logistics (recorded, end in 1 hour, next steps, confidentiality). Q&A

Recommend inserting bullets or steps, such as:

- This interview will be recorded
- The estimated time for the interview will be 1 hour
- Explain how I will maintain confidentiality

5 min

Main Section: **30 min**

1. Ask participants to introduce themselves - their experience with managing projects, successes, failures, etc.

2. Ask if they use any strategies that worked best to encourage learning from project teams' experiences.

3. Explore any differences in approaches to encourage and facilitate learning from successful and failed projects. Probe for details.

4. Inquire about critical elements in their strategies to encourage learning from project experiences. Probe for details.

5. Ask about their use of external support networks (if any) to encourage and facilitate learning from project experiences.

6. Probe for additional information about strategies to encourage and facilitate learning from project experiences.

Conclusion: **15 min**

1. Thank the participant for their time and openness.

2. Describe the next steps:

    2.1 Deletion of the interview recording immediately after transcription

    2.2 Request for documents:

Examples of the documents that may be useful:

- project presentations,

- project correspondence,
- project communication

Any format - pdf., doc, ppt would do, as long as the company and project specific information, and personal details of the project participants are deleted. Sharing via Google drive (link to be emailed).

4. Schedule follow up call.

5. Q&A

Thank the participant and close the interview.

Appendix B: Document Collection Matrix

Managerial Strategies to Encourage Learning from Failure

Type of Document	Format	Access
PUBLIC Company business (strategies, initiatives), project background (objectives, significance, elements, impact)		
1. Company Website 2. Media Reports 3. Press Releases	Html .pdf, .jpeg, .doc, .ppt .pdf, .jpeg, .doc, .ppt	Discuss with participants during interview/ member checking
PRIVATE NB – Censor Company/Project/Personal details		
4. Project plan/ brief / presentation 5. Project progress meeting minutes 6. Project progress reports/presentations (incl. images) 7. Project team correspondence 8. Project announcements (staffing/rewards) 9. Internal company publications on the project (incl. images).	.ppt. .pdf .doc .ppt, .doc, .pdf .doc .pdf, .jpeg, .ppt .pdf, .jpeg, doc	Request access in IC Discuss during interview Share via Google drive

Appendix C "Post-mortem Report" (Case 2)

PROJECT THUNDER After Action Review - Meeting Notes 18/04/2013

Participants:
Xxx
yyy

I. M&A Strategy 2011

UPs:
- Strategy session at the beginning of the entire process – good learning experience
- Involving a lot of people/resources – leading to better outcomes
- Development of visions table ("blueprint", "vision statement") – can now be used for the entire [redacted]/easy to understand
- Breaking down of visions into numbers/figures (e.g. "leading" -> EBITDA of USD 20m) – ensures that everybody knows what this means
- Documentation of the process – good for new hires to understand the background & outcomes/ good to educate/brief the board
- Use/development of a common language – everybody understands/entire management team is in sync/everybody is at the starting line together
- Writing down single reason for an acquisition by everybody – good for the communication with the shareholder once agreed/good guidance

DOWNs:
- High level of efforts/resources to develop strategy ("heavy process")
- Process in the middle of the strategy development (between "vision" and "actual outcome") seemed to be slightly overdone/hard to work through
- Only few of the tools were used/people do not really know them (anymore)
- Real/tangible outcome "how are we going to do that" was sometimes still missing

Tools used in/for the strategy development process:
- Prospect screening tool – not really used
- Gap analysis – was good
- Market screening tool – not used during the process
- Adjacency universe – helped to narrow down the focus/good for a flushing process, but overall a little junky?

Criteria to choose the M&A advisor:
- Trust in research capabilities
- Approach to find targets
- Honesty (e.g. challenging [redacted]'s decisions)
- Stability in the market/no fear of disappearing
- Personal relations/cultural fit
- Experience in M&A also in buy-side processes
- Mid-market focus
- Global presence, e.g. in [redacted]