Reflective practices of Learning and Development professionals: A mixed method study

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ABSTRACT

Despite the consensus that Learning and Development (L&D) professionals should infuse opportunities for reflection into their training and development solutions, little is known about how L&D professionals themselves engage in reflective practices or if their perceptions of workplace culture influence those reflective practices. This study examined the ways in which L&D professionals employed in industry, government, and non-profit organizations engage in reflective practice, the extent to which they perceive their organizational culture to be supportive of learning and reflection, and the ways in which they demonstrate the impact of their reflective practices on job performance. The study used a mixed methods approach combining an online survey of 73 L&D professionals from the US, UK, Canada, and Australia with 12 follow-up telephone interviews. Study results indicated that L&D professionals tended to primarily engage in project-based reflective practices. Further, although the learning culture of an organization appeared to influence reflective practice, study participants were able to work around any constraints presented by the organizational context. Implications for theory, practice, and professional education are also discussed.

Keywords: Reflective practice, learning and development, learning culture, mixed methods

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INTRODUCTION

There has been considerable research about the benefits of reflective practice in various professions, such as health and social services (Redmond, 2017), medicine (Law & Shafey, 2019), and banking (Antonsen et al., 2011), with much of the research conducted in structured learning settings (academic degree programs, continuing and professional education programs) rather than in workplace settings, where differences in organizational culture and context can affect reflective behaviors (Justice et al., 2019; Quinton & Smallbone, 2010; Rigg & Trehan, 2008). None of these studies focused on Learning and Development (L&D) professionals.

As a practice domain, L&D involves (a) organizational efforts that facilitate the acquisition of knowledge and skills through experience, learning events and programs for individuals and teams, (b) guidance and coaching provided by managers, and (c) self-directed learning activities that individuals themselves undertake (Armstrong & Taylor, 2014). The Society of Human Resource Management (SHRM) categorizes L&D as one of the five functional areas in the People domain of the SHRM Body of Competency and Knowledge™ (Society of Human Resource Management (SHRM), 2019), encompassing skill sets ranging from the creation and successful implementation of formal learning programs (training, formal mentorship programs, etc.) to techniques for career development (e.g., career pathing, career mapping). Similarly, the Chartered Institute of Personnel and Development describes the L&D function as "creating the culture and environment for individuals and organisations to learn and grow," (Chartered Institute of Personnel and Development (CIPD), 2019), and provides opportunities for L&D professionals to earn varying levels of certification based on the U.K. and European Qualifications framework. The International Society for Performance Improvement (ISPI) looks at workplace performance systematically, and includes among the professional competencies the ability to recognize how the current culture supports or impedes the desired performance (International Society for Performance Improvement (ISPI), n.d.). Common to all three professional bodies is the characterization of L&D as a sphere of activity that is intricately linked to organizational culture and context and encompassing multiple occupations with a variety of function titles, such as performance improvement specialist, instructional designer, and training and development specialist, among others. Consequently, the L&D professional is recognized as a key contributor to performance at the individual, team, and organizational level (Arney, 2017; Reese, 2020) and as such, is worthy of closer study when investigating reflective practices.

The purpose of the present study was to examine the perceptions of L&D professionals about their own reflective practices and the perceived influence of organizational culture and context on their reflective behaviors. The contribution of the study is two-fold. First, it contributes to empirical research by offering L&D professionals' own perspective on what constitutes reflective behavior. To that end, the study employs both quantitative and qualitative data to address the "what" and the "why" of reflective practices from L&D professionals recruited outside of structured learning settings and employed in a variety of organizational contexts. The exploration of real-world reflective practices is central to advancing our understanding of the relationship between reflective practice and organizational culture/context (Otoo & Mishra, 2018). Second, the study findings may provide some practical measures to assist organizations in developing concrete mechanisms to support reflective practices in the workplace. Study findings may also be helpful to L&D-related academic programs seeking to design reflection activities and assignments that are relevant to real workplace conditions.

LITERATURE REVIEW AND RESEARCH QUESTIONS

Reflective Practice

The literature offers many frameworks and definitions with which to investigate reflective practice. For example, some research consists of theoretical/conceptual papers focused on reflective practice as a process of reviewing from the past in order to make sense of present workplace situations (Bulman, 2008; Oelofsen, 2012), or as a way of thinking through purposeful contemplation (Mann et al., 2009; Pavlovich, 2007). Other papers have focused on the extent to which the terms "critical reflection", "reflective practice", and "reflexivity" are (not) interchangeable when it comes to examining the cognitive and affective processes associated with examining one's own assumptions and biases (Cunliffe, 2016; Fook et al., 2006; Mezirow, 1998). There have also been studies focused on tools and processes to promote reflection among students (Hartescu, 2012; Jones & Cookson, 2001; Koukpaki & Adams, 2020), including storytelling, journaling, and reflecting on critical incidents where the incidents are linked to their wider social contexts. The present study seeks to identify the specific behaviors in which L&D professionals purport to engage in order to use what is learned to reshape their thinking, with no ingoing assumptions about breadth or depth of that learning. For that reason, this paper adopts Yorks, Rotatori and Sung's (2020, pp 310-311) broad definition of reflective practice as "an action-orientation process in the service of problem solving."

Several studies have investigated ways in which to make reflective practices observable in the workplace using surveys and interviews. As part of a comparative case study to operationalize the idea of reflective practice, Hilden and Tikkamaki (2013) constructed a questionnaire containing 15 propositions regarding reflective practice: one at the intersection of three levels – individual, integration, and institutionalizing – and five elements of control (cultural, planning, cybernetic, reward and compensation, and administrative). The survey was used in three small businesses in Finland to explore the extent to which reflective practice results in the generation of new innovations relating to work practices and processes (Hilden et al., 2014). Results showed strong correlations between reflection at the organizational level and collective idea generation and utilization, suggesting that the processes and practices that allow reflection merit further study in concert with the reflective behaviors observed in other organizations. It is unclear, however, whether L&D professionals were included in the study population.

Maurer, Leheta, and Conklin (2017) used surveys and interviews to identify the ways in which business students reflected on challenging experiences at work. The results of their study suggested that the reason for reflection is understanding experiences with an eye to change or improvement, with talking and thinking being the primary modes of reflection. Priddis and Rogers (2018) introduced a 40-item questionnaire designed to measure the experiences, benefits, ad potential pitfalls of reflective practice and reflective supervision in the service industry. Preliminary results from a test among a small sample (n=45) of healthcare professionals suggested a positive relationship between reflective practices and practitioner self-confidence, and an association between positive appraisal of reflective supervision and greater self-reported reflection, among other insights. More open-ended approaches to identifying reflective behaviors have examined the language in workplace diaries and journals (Chapman et al., 2009; Greenall & Sen, 2016; Rigg & Trehan, 2008), phenomenological analysis of in-depth interviews with military aircrew mission commanders to assess the impact of facilitating reflective practices after

stressful events vs routine tasks (Moldjord & Hybertsen, 2015), and a qualitative analysis via grounded theory techniques of senior security risk managers to explore the extent to which they use reflection to improve their professional practice (Hasenstab, 2018). One study did endeavor to explore how L&D professionals use reflective practice by using autoethnographic analysis of an interview and taped conversations with an L&D manager working in the hotel industry (Koukpaki & Adams, 2020). There were, however, few commonalities among the words or classification of reflective behaviors across these studies of reflective practice.

With little evidence about whether L&D professionals see themselves as engaging in reflective practice, the first research question guiding the present study was:

RQ1: What specific behaviors do L&D professionals attribute to their own reflective practices?

Organizational Culture

Organizational culture affects workplace behavior by providing employees with a common mode of thinking that enables them to differentiate between what is (not) important (Schneider et al., 2013). Culture reflects management perceptions of the world, the underlying identity that reflects its core assumptions, beliefs, and ways of doing things (Pettigrew, 1979; Schein, 2004; Schneider et al., 2013). If culture serves as a guide for action in an organization, then the L&D professional must be able to assess the extent to which the organizational culture is supportive of learning and development and by extension, of reflective practice. The literature offers three distinct constructs associated with supportive cultures: organizational learning, learning organization, and learning culture.

Organizational learning has been defined as an activity that involves solving problems by examining the appropriateness of current learning behaviors and questioning the assumptions that underlie the existing ways of working, experimenting, and creating (Argyris & Schon, 1978; Brown & Duguid, 1991; Cook & Yanow, 1993). Organizational learning includes learning at both the individual and group levels, with mechanisms in place to share that learning across the organization and change the organization's knowledge base for improved decision making (Anderson & Lewis, 2014; Argote & Miron-Spektor, 2011; Basten & Haamann, 2018; Schilling & Kluge, 2009).

A learning organization facilitates opportunities for its members to learn, enabling continuous organizational transformation (Jamali, 2006). Sankowska (2013) noted that in a learning organization, knowledge is transferred between individuals, groups and departments effectively and on a voluntary basis. There have also been comprehensive reviews of the literature that emphasize the differences between organizational learning and learning organization (Kim et al., 2017; Odor, 2018; Ortenblad, 2018; Reese, 2020; Watkins & Kim, 2018); however, there remain differences as to what observable behaviors characterize either of these constructs and thus, how the constructs impact reflective practices.

The third construct that seeks to identify organizational cultures supportive of learning is learning culture. Strong learning cultures recognize that employees have a right to receive time for training, for reflecting on their professional development needs, and for seeking out opportunities to meet those needs (Hoyle, 2015). Schein (2004) described learning culture as possessing ten characteristics, such as environment, involvement in decision making, and openness to change, and that these characteristics were a continuum upon which the learning culture of an organization would fall at various points in time. The present study sought to identify those organizational characteristics that L&D professionals deem conducive to learning

and reflection. This perspective aligns with the construct learning culture and as such, is the construct adopted for the present study.

Among the earliest efforts to measure learning culture was the Dimensions of Learning Organization Questionnaire (DLOQ). This instrument's underlying premise was that only a strong learning culture and climate can support employee learning, and that climate and culture are built by leaders and influencers who learn from their experiences, influence the learning of others, and create an environment of expectations that determines desired results that, when achieved, are measured and rewarded (Marsick & Watkins, 2003). The 43-item DLOQ and a shortened 21-item version developed by Yang (2003) have been used to examine learning culture in various industry sectors and settings, particularly concerning the impact of learning culture on performance (Dymock & McCarthy, 2006; Ellinger et al., 2003; Ju et al., 2021; Leufvén et al., 2015). There have been issues, however, around the method used to deploy the instrument, with some studies selecting specific items from the DLOQ that the researchers deemed to better fit their respective contexts while still capturing each dimension of the model (see, for example, Chai & Dirani, 2018; Song et al., 2018). Therefore, additional research questions addressed in this study were:

RQ2: What organizational elements do L&D professionals perceive as supporting their engagement in reflective practices?

RQ3: How do L&D professionals demonstrate the impact of reflective practice on their workplace performance?

METHOD

The present study follows the recommendation of Kim, Egan and Tolson (2015, p. 107) that "mixed-method evaluative and research approaches hold the potential for better understanding of employees' individual reactions to the organizational learning environment." To that end, the present study employed an equal-status sequential mixed methods design (Cameron, 2009; Schoonenboom & Johnson, 2017). The quantitative component involved a multi-item online survey and the qualitative component consisted of a series of one-one-one interviews among survey respondent volunteers, for more in-depth exploration of survey results. The study was reviewed and approved for the ethical conduct of Human Subjects Research (IRBNet No. 1055807-1), and anonymity and confidentiality were guaranteed for all responses.

QUANTITATIVE COMPONENT

Survey Sample

Survey respondents were recruited via opportunistic sampling (Teddlie & Yu, 2007) using a call for participation on LinkedIn. Although LinkedIn purportedly has 740 million members (Kinsta, 2021), it was not possible to calculate response rates because it was not known how many people saw the call for participation. Moreover, the occupational fragmentation of the L&D field, along with anecdotal evidence indicating that surveys with more than five items tend to receive very low response rates (for insights on survey response rates on social media sites, see Stokes et al., 2017), there was no expected sample size nor did the purpose of the study require a representative sample from which to make statistics-based generalizations. Potential

respondents were only required to self-identify as L&D professionals and to work in non-educational settings (industry, government, non-profit organizations).

Seventy-three individuals who self-reported as currently employed in the L&D field in non-educational settings completed the online survey. Most respondents (69%) resided in the US. The remainder were evenly divided among residents from the UK, Canada, and Australia; 61% of the sample was female. In terms of employment, 63% were employed in private, for-profit industry sectors, with most respondents (75%) working full-time; there was little variation in terms of those employed in small (<250 employees), medium (250-999 employees), or large (≥1,000 employees) organizations. In terms of function level, 59% of survey respondents were managers and 41% were non-managers, with managers working longer in the L&D field than non-managers (M = 13.4 years, SD = 7.48 vs M = 12.3 years, SD = 8.58 for non-managers), as well as having longer tenure with their current employer (M = 6.54 years, SD = 6.80 vs M = 4.25 years, SD = 4.26 for non-managers). Half (56%) of all respondents reported their primary area of responsibility as instructional/training design/development, while 19% reported overall L&D management as their primary responsibility. The remaining 25% of respondents mentioned a variety of L&D functional titles and areas. Survey respondents were highly educated, with 63% holding advanced or terminal degrees.

Survey Instrument

To assess reflective practice and supportive learning culture, the survey drew upon published questionnaire scales to generate 19 items measured on a six-point Likert scale, with 1 = *disagree strongly* to 6 = *agree strongly*. To assess reflective behaviors, the studied applied three individual-level reflective practice proposition statements of Hilden and Tikkamaki's (2013) 15-item instrument and six individual-level, occupation-neutral items from Lawrence's (2011) 22-item Critical Reflective Practice Questionnaire, for a total of nine items, M=4.71, SD=0.64, α=0.69. The remaining 10 items, M=4.14, SD=0.93, α=0.91, were drawn from Yang's (2003) 21-item version of the Dimensions of Learning Organization Questionnaire and focused on individual behavior items. The scale reliability tests (Cronbach's α) of .69 for reflective practice and 0.91 for learning culture were within the generally accepted norms for social sciences research (DeVellis, 2016; Vaske, 2019). Table 1 (Appendix) presents all item wordings, means, standard deviations, as well as sources for each item.

Statistical Analysis in SPSS 26

Descriptive statistics were used to estimate the means and standard deviations of each item and correlation analysis was used to investigate relationships between reflective practice and learning culture. Exploratory factor analysis with Principal Axis as the method of extraction and Promax as the rotation method were used to identify underlying constructs in the data (Fabrigar & Wegener, 2012). Statistical tests used an alpha level of $\rho < 0.05$.

QUALITATIVE DATA COMPONENT

Interview Participants

Of the 73 survey respondents, 12 (nine females, three males) volunteered to participate in the follow-up telephone interviews by providing their contact information at the end of the survey. Seven interview participants were managers and five were non-managers, with an average of 11.8 years in the L&D field. Ten of the 12 held advanced degrees in various disciplines, such as instructional design/technology, human resource development and the social sciences. All but one of the participants (a resident of Canada) resided in the US.

Interview Data Collection

To gather more in-depth information to help explain the survey findings, data were collected using telephone interviews. The telephone interview guide contained the following questions:

1. How would you define the term "reflective practice"?
2. What are some of the ways you use to engage in reflective practice?
3. What tools (if any) do you use to keep track of your lessons learned during and after your process of reflection?
4. Has technology helped you in any way to become a reflective practitioner?
5. What are some of the ways you demonstrate the impact of reflective practice on your own performance?
6. Thinking about your own organization, what efforts have you made to encourage reflection among colleagues and peers?

A total of 12 interviews were conducted, recorded digitally, and sent to a professional transcription service, yielding 92 pages of verbatim transcription for a total of 33,965 words. Each participant received a copy of his/her interview transcript to confirm the accuracy of transcript content.

Interview Data Analysis in NVivo 12

The interview transcripts were coded using the six-phase thematic analysis process: data familiarization, code generation, theme identification, theme review, theme naming/describing, and reporting (Braun & Clarke, 2006). The researcher was the sole coder, which is appropriate for small studies (Lipsey & Wilson, 2001). After reading through all 12 interviews (data familiarization), the researcher created codes using single sentences and sentence fragments as the coding units (code generation). Codes were examined for common ideas or themes (theme identification), then consolidated by theme (theme review), named (naming/describing), and the final codes structured into a category system of themes and sub-themes (reporting). To promote coding consistency, the researcher (a) selected three transcripts at random and coded them, (b) recoded those same three transcripts one week later, then (c) compared the two sets of codes item-by-item (Yeaton & Wortman, 1993). There were a few discrepancies between the two sets of codes, all of which were resolved based on recurring themes to determine best fit (Orwin & Vevea, 2009). The researcher repeated this coding process over a one-month period until all 12 interviews were coded.

RESULTS

This section presents the findings from analysis of the quantitative, survey data component of the study, followed by analysis of the qualitative, interview data component. Findings from the two components are then integrated and displayed in tabular format to show how the quantitative and qualitative components compare in terms of addressing the research questions.

Survey Results

Respondents described themselves as engaging in a variety of behaviors that they would consider reflective practices. As previously shown in Table 1 (Appendix), the highest rated item among the nine reflective practice items was RP1 "I think it is valuable to take time to think critically about my work" (M=5.81, SD=0.46), followed by RP8 "I try to learn from the challenges and troubling experiences I face at work" (M=5.62, SD=0.66) and RP9 "I'm good at developing new ideas related to my work" (M=5.30, SD=0.76). The lowest rated items were RP3 "I write about my work-related experiences in a diary, journal or blog" (M=2.85, SD=1.72) and RP6 "I regularly take time to think critically and creatively about my work because my organization rewards me for it" (M=3.78, SD=1.49). All the other reflective practice items had mean estimates ≥ 4.12 on a 6-point Likert scale. In terms of learning culture, six of the 10 items had mean estimates ≥ 4.18 on a 6-point Likert scale, with LC7 "In my organization, there is top management support for professional activities and events related to our work" earning the highest rating (M=4.39, SD=1.36), followed closely by LC6 "My organization provides support for professional activities and events related to our work" (M=4.38, SD=1.09) and LC3 "In my organization, teams/groups revise their thinking as a result of group discussions or information collected" (M=4.38, SD=0.98). The lowest rated item was LC8 "My organization creates systems to measure gaps between current and expected performance" (M=3.74, SD=1.42).

As expected, correlation analysis revealed a significant positive relation between reflective practice and learning culture ($r=0.48$, $p<0.01$ two-tailed test). A comparison with Spearman's rho, often used with ordinal data (Ferrari & Barbiero, 2012), showed a similar level of positive relationship ($r_s=0.44$, $p<0.01$ two tailed test), supporting the assumption of linearity for further analyses. Results of an independent samples t-test showed no statistically significant differences in reflective practice ratings for managers (M=4.76, SD=0.64) and non-managers (M=4.64, SD=0.63); $t(71) = 0.76$, $p = 0.45$. Similarly, there were no statistically significant differences in learning culture ratings for managers (M=4.23, SD=0.81) and non-managers (M=4.02, SD=1.08); $t(71) = 0.95$, $p=0.34$.

Outcomes of the exploratory factor analysis indicated that the data set met several well-described criteria for factorability (for a detailed discussion of factorability criteria, see for example, Beavers et al., 2013; Costello & Osborne, 2005; Matsunaga, 2010; Spicer, 2005). First, the Kaiser-Myer-Olkin (KMO) measure of sampling adequacy was .76, above the commonly recommended value of .70, and Bartlett's test of sphericity was significant ($\chi 2\ (171) = 734.88$, $p < .01$). Second, the inter-item correlation matrix presented in Table 2 (Appendix) shows all 19 items correlated significantly at $p < .05$ with at least two other items, suggesting reasonable factorability. The diagonal values of the anti-image correlation matrix were also ≥ .5. Lastly, the initial commonalities were all above .35, further indicating that each item shared some common

variance with other items. Based on these criteria, factor analysis was deemed appropriate with all 19 items.

Principal axis analysis was chosen because the purpose was to identify latent constructs of reflective practice and learning culture, i.e., determining the number of factors underlying the variation in and correlation among the 19 items, as well as identifying the items that load onto particular factors. Using the standard criteria for identifying factor structures – eigenvalues ≥ 1.0, scree plot analysis, and factor interpretability (Stevens, 2002) – three factors satisfying all three criteria emerged, explaining 47% of the variance. Although this percentage is a lower level than what is deemed acceptable in the physical sciences, "in the social sciences, where information is often less precise, it is not uncommon to consider a solution that accounts for 60 percent of the total variance (and in some instances even less) as satisfactory" (Hair et al., 2014, p. 107). Promax rotation was used to obtain the highest correlations among the factors while achieving a simple structure (Abdi, 2003). One item – LC10 "My organization works together with the outside community to meet mutual needs" – was eliminated because it did not contribute to a simple factor structure and failed to meet the minimum criteria of having a primary factor loading of .4 or higher as well as no cross-loading of .3 or higher. The pattern matrix for this final solution is presented in Table 3 (Appendix).

In line with Yong and Pearce's (2013) point that factor labeling "is more of an art as there are no rules for naming factors, except to give names that best represent the variables within the factors" (p. 91), Factor 1 was labeled Organizational Enablers (Cronbach's $\alpha = 0.91$) because it contained all nine of the items measuring organizational support for learning. Factor 2, Collaborative Qualifiers (Cronbach's $\alpha = 0.69$), contained six of the reflective practice items and focused on interaction with others, while Factor 3, Tools and Techniques (Cronbach's $\alpha = .59$), contained the remaining three reflective practice items and focused on personal, individual practices. No substantial increases in alpha for any of the factors would have been achieved by eliminating more items.

Overall, the results of these analyses indicated that unlike previous empirical studies of reflective practice, reflective behaviors split into two distinct factors, each focusing on a different aspect of reflective practice. Further, the relatively modest correlations between factors – 0.35 between Organization Enablers and Collaborative Qualifiers, 0.41 between Organization Enablers and Tools and Techniques, and 0.28 between Collaborative Qualifiers and Tools and Techniques – suggest that the three factors are distinct from one another, raising the question of how much learning culture shapes reflective practice (for a detailed discussion of factor analysis and discriminant validity, see Farrell & Rudd, 2009).

INTERVIEW RESULTS

As shown in Table 4 (Appendix), three main themes emerged from the responses to the six interview questions, namely project retrospection, personal introspection, and organizational parameters.

Project Retrospection

The first main theme contained three sub-themes: lessons learned, sharing with others, and tools for retrospection. Participants stated that lessons learned would be gathered not only at the end of a project but throughout the project lifecycle. Participants spoke of keeping

themselves aware of what they were doing and of the impact of the decisions made to complete each task, as a way of continuously improving. As participant C03 stated, "It might be a topic or task within a project, or it might be some outcome of a meeting that you attend, where you sit back and say okay, we might need to do some more research on this particular area or topic and learn more." Lessons learned during the project were deemed essential to managing stakeholder expectations and keeping them focused, particularly when challenges arose. As participant C02 explained, it's "being able to talk them through the logistics of what's going on and help prioritize when things are sort of falling all around them." At the end of the project, participants examined what worked or did not work for them as individual contributors but also group processes and procedures. Participant D03 referred to this as "making sure that my contribution to that process is as optimal as it can be to maximize the learning experience and also make sure the development process gets more fine-tuned over time."

Sharing with others during and after the project, the second sub-theme, was a critical component of project retrospection, with participant A03 noting, "I really like accumulating a list of lessons learned throughout a project and then compiling those at the end and discussing with the team what those things are and what some best practices should be moving forward into other projects." Tools for retrospection, the third sub-theme, included team conversations and status meetings conducted throughout the project, as well as office productivity tools such as Word or Excel, to document lessons learned. As participant A04 stated, "sometimes I"ll just have a running Word document on our SharePoint and encourage the team to record things there." In sum, project retrospectives provided insights into what was (not) working in a specific project and as a guide for action for future projects, with no consistency in tools or technologies for documenting and sharing those retrospectives.

Personal Introspection

The second main theme contained two sub-themes: self-examination and professional growth. Participants stated that reflecting on one's own work helped broaden their thinking as well as enhance their skills, enabling them to identify and learn from mistakes in order to be stronger contributors to the organization's L&D function. As participant D03 stated, "I think it's more about looking at myself as the designer but also seeing how I fit into that learning and development process." Participants noted that it requires a willingness to look inward, so that reflection becomes, in the words of participant A01, "a natural thing to do."

Not unrelated was the sub-theme of professional growth for career development. Participants stated that reflection was essential to career-building, to establishing one's own personal brand image as an L&D professional. As noted by participant E03, "I think it's a great thing to be able to reflect on things outside of the project, your performance, and the relationships, your internal brand, so to speak." Participants saw reflection as a personal discipline that must be built early in one's career so that it becomes an integral part of professional practice. Participation in conferences/events, online forums and groups were mentioned as ways of expanding technical skills as well as building one's own professional networks to exchange ideas and learn how others reflect on their own professional practice.

Organizational Parameters

The third main theme contained three sub-themes: time constraints, infrastructure, and culture. First, participants perceived the pressure to complete one project then move on to the next project as a barrier to engaging in reflective practices. As participant C02 stated, "I think that's the enemy of reflective practice, this state of play of crunch and everything being critical." Participants were challenged to take time out of the workday to reflect beyond formal, project debriefing meetings, so broad and deep reflection was often sacrificed because, as participant B02 noted, "it takes time and we don't have time for that kind of thing." Participants stated that working within the constraints of time was a skill that evolved over the career lifespan and that early- to mid-career professionals were too consumed with day-to-day tasks to take time for personal reflection. As participant A03 put it, "at the beginning of my career, I didn't really reflect, or at least write those things down as personal lessons learned; I just focused on getting the job done."

Infrastructure, the second sub-theme, focused on technology and systems that could either help or hinder reflective practice. Participants were aware of the affordances of their organization's technology infrastructure when it comes to documentation and record-keeping; however, they did not place a premium on technology for engaging in reflective practice. Typical was the following comment from participant E03:

> I think that technology certainly has its place and is extraordinarily useful at maintaining records, but I wouldn't say I would want to replace the interpersonal pick-up-the-phone or walk-down-to-somebody's-desk with an email or with a review in the system. I think there's a way to combine the two into something a little bit more organic.

Moreover, interview participants stated that reflective practice is rarely integrated into the employee performance review process, either as a topic of discussion or in support of accomplishments. As participant A04 put it, "I'm not held accountable to reflect on stuff with my team, but I do a little bit of it because I'm a Learning and Development professional trained to know why it's important."

Culture, the third sub-theme, offered opportunities as well as constraints when it came to reflective practice. On the positive side, some participants stated that their organizations allowed employees free reign for reflective practice during the business day. For example, participant A01 stated, "I think that everyone in my organization practices all kinds of reflection, ranging from the personal, taking-your-time-to-think-about-it, to very tactical debriefing and brainstorming sessions. We are definitely encouraged to all reflect in those type of settings; yes, I think our organization is pretty tuned when it comes to supporting reflective practice." Other participants stated that their organizations were not especially interested in reflective practice and focused exclusively on tangible, end results. As participant A02 put it, "a lot of people aren't interested in how I got to 'B', they just want to know I got to 'B'." Participants did state how they were able to work around any cultural constraints by emphasizing to management the importance of time for reflection, such as participant D02 who stated, "I used the word 'reflecting' and thinking about and discussing what we've learned. He's the vice president so I had to frame it very appropriately. I haven't heard back from him, but I still have a job." Other participants took the initiative to encourage reflective practice among colleagues and peers outside of working hours. As participant D03 put it, "I think reflection does need to take some time outside of work environments. I think that people tend to be a little bit more open, at least in

my organization, outside of the normal work. You have more time to probe and have a more meaningful exchange with them."

Integration of Quantitative and Qualitative Results

Table 5 (Appendix) presents a joint display that simultaneously arrays the quantitative and qualitative results for each research question. When identifying the specific behaviors that characterize their own reflective practices (RQ1), participants differentiated between project-by-project group interactions and solitary tasks for self-improvement. Survey results showed a clear division between work-related reflection and personal reflection, with participants more likely to engage in the former than the latter. This division between work-based reflection and personal reflection was affirmed by the interview data in which participants described their own reflective practices as more focused on specific work projects than on general self-improvement. This suggests that although L&D professionals recognize that reflective practice is multidimensional, they tend to place more emphasis on reflection as an event-based process tied to what does (not) contribute to the success of a specific work project.

In terms of the extent to which an organization's culture supports reflective practice (RQ2), the centrality of organizational context was evident in the clustering together of all learning culture items but the individual item scores also showed that participants saw the need for improvement when it comes to their organization's support of learning and reflection. This mixed picture of organizational support was explained by participants do-it-yourself approaches to reflective practices that infused reflection into project-related tasks and activities using whatever tools, technologies, and opportunities for group interaction with which they were familiar.

Lastly, participants were not especially pro-active or systematic when it came to demonstrating the impact of reflective practice on their workplace performance (RQ3). Like the results for RQ1, survey results showed a focus on those reflective behaviors that would directly impact their contribution to a particular project. Moreover, the qualitative data indicated that reflective practice was rarely discussed in formal performance reviews. Instead, participants relied on anecdotal feedback from project stakeholders and/or peers, with only a few participants taking the initiative to overtly advocate for more opportunities for reflective practice.

DISCUSSION

The present study sought to fill the research gap concerning real-world reflective practices among L&D professionals by employing a mixed methods research approach to ascertain how those professionals describe their own reflective practices and how those practices may be influenced by organizational culture and context. Findings from the quantitative and qualitative study components indicated that the underlying constructs of reflective practice were centered around work-related interactions on the one hand, and personal behaviors for individual self-improvement on the other hand. Further, the learning culture of an organization appeared to play a greater role in work-related interactions than on self-improvement behaviors. Nevertheless, participants appeared to be able to work around any constraints or barriers to work-related interactions by capitalizing on opportunities for reflection in the workplace.

In identifying the specific behaviors that L&D professionals attribute to their own reflective practice (RQ1), study participants stated that they engaged with others about what

worked (did not work) for a particular project. This is akin to Schön's (1983, 2016) reflection-in-action, as well as Prilla et al.'s (2015) collaborative reflection at work. The work-based reflective behaviors (Collaborative Qualifiers) emerging from the factor analysis and the Project Retrospective theme from the interview data analysis also align with team-based retrospective methods for evaluating project performance, extracting lessons learned and informing future recommendations used in the information technology field (Nelson, 2010; Rising & Derby, 2003). This is a sobering finding considering the broader, more critical approaches to reflection emphasized in professional education (see, for example, Faller et al., 2020; McLeod et al., 2020).

An explanation for this may lie in the nature of L&D as a practice domain. Much of the work performed by L&D professionals is project-based, with many employed in organizations in which the majority of products or services are produced through projects for internal and/or external clients (Pemsel & Müller, 2012). Consequently, it makes sense for L&D professionals to think of their reflective practices in terms of project retrospection. Moreover, project retrospectives have evolved from exclusively "post-mortem" activities to a more iterative, routinized group process similar to agile approaches to project management (Eckstein, 2019). Participant use of office productivity tools rather than personal, reflective journals to document retrospectives aligns with the value participants placed on sharing and feedback among project team members.

The centrality of organizational context (RQ2) evident in the clustering of all learning culture items into one factor (Organizational Enablers) aligns with previous research that identified commitment to learning and development through leader modeling, employee empowerment, and encouraging collaboration and team learning as essential to performance at the individual, group, and organizational levels (Egan, 2008; Matsuo, 2016, 2018). Barriers such as time constraints, and lack of firm management support for learning that study participants cited have also been cited in other studies as reducing opportunities for workplace reflection (Brown, 2019; see, for example, Miller, 2020; Nathwani & Martin, 2021). Consequently, the finding that study participants worked around perceived organizational barriers/constraints to reflective practice in the workplace was unexpected. One explanation might be the "hidden" influence of participant desires for professional growth and self-examination (the Personal Introspection theme from the interviews) and organizational recognition of work-related reflection implicit in the Personal Tools and Techniques factor emerging from the quantitative data analysis. The correlation between the factor encompassing organizational support for learning and reflection (Organization Enablers) and the factor encompassing personal, individual practices (Tools and Techniques) was the highest of the inter-factor correlations, suggesting that participants perceived that organizational barriers could be overcome by taking the initiative and working around those barriers.

The finding that study participants did not strive to demonstrate the impact of reflective practice on their workplace performance (RQ3) and defined "impact" in terms of what worked (did not work) for a particular project is consistent with what the extant literature deems a general dilemma facing L&D professionals. That dilemma stems from the considerable variation by industry sector as well as by organization in how the employee contribution to business performance is measured (Edmondson et al., 2003; Elnaga & Imran, 2013; Kuo, 2011). Further, employees with authority and experience are more likely than early- career employees to take the initiative to advocate for reflective practice as central to performance (Damanpour & Schneider, 2006; Jones et al., 2008). Although there were no statistically significant differences between managers and non-managers in the present study, study participants who were managers had

been working slightly longer in the L&D field than non-managers (M = 13.4 years, SD = 7.48 vs M = 12.3 years, SD = 8.58 for non-managers), and had longer tenure with their current employer (M = 6.54 years, SD = 6.80 vs M = 4.25 years, SD = 4.26 for non-managers).

IMPLICATIONS

Looking at reflective practice through an occupational and/or industry lens contributes to the development of theory regarding the linkages between specific reflective behaviors and the nature of the work. Reflective practice needs to be an integral part of work-related learning (Fergusson et al., 2019). Therefore, studies like the present one can be used to create portraits of the reflective practitioner by profession and by industry sector, going beyond more generic descriptions of the reflective practitioner and generating more observable and measurable reflective practice behaviors. Such an approach would enable researchers to include and measure the impact of specific organizational cultures when examining reflective practice behaviors. This study also contributes to the L&D literature by demonstrating the extent to which L&D professionals' reflective practices contribute not only to project performance but by extension, to team and organizational performance.

In terms of practical implications, the present study offers insights into how organizations can infuse reflective practice into their daily workflow. Managers can coach and mentor their direct reports using reflection in the performance review process, in team meetings, as well as in professional development events such as brown bag lunches. Managers can capitalize on existing L&D project processes by documenting and enhancing the project retrospective process itself, so that those within and beyond L&D have a model for incorporating reflective practices into the project lifecycle. Infusing reflection into all employee learning opportunities from the moment of onboarding can help to integrate reflective practice into the organizational culture. Moreover, study findings call attention to the need for L&D professionals to become well versed in the workings of their respective organizations, including the nature of the business as well as the politics and human dynamics involved. This can encourage the self-driven practices identified in this study and enable L&D professionals to identify and cultivate stakeholders as reflective practice advocates.

Lastly, study results may be helpful for L&D-related academic programs in setting expectations for students seeking to enter the field in non-academic workplace settings, so that they can design reflection activities and assignments that emphasize information sharing at the project level, along with ways to document their reflections to demonstrate impact on workplace performance. Further, those activities/assignments can help students to learn to build awareness of the organizational contexts in which L&D professionals work, enabling them to navigate the non-academic job market and support their development throughout their career.

LIMITATIONS AND FUTURE RESEARCH

Like many studies in the social sciences, the present study is not without limitations. First, the survey sample size was relatively small. Future research should strive to get a larger sample size and/or take a more targeted approach (e.g., L&D professionals in a particular industry) to obtain more generalizable results. A larger sample would also enable more robust statistical analyses and inferences, such as confirmative factor analysis for testing hypotheses

about the elements of reflective practice, or structural equation modeling for predicting the impact of organizational culture on reflective practice.

Moreover, data collection took place in 2021 in the middle of the COVID-19 pandemic and at a point when most communication and collaboration was conducted in a digital environment. As more and more organizations push for a return to the physical office, it would be valuable to compare mid- and post-COVID reflective practices.

The survey instrument and follow-on interview questions were grounded in Western indicators of reflection and organizational culture, a second study limitation. Although there have been studies using instruments in languages other than English, exploratory research on reflective practice in non-Western countries would advance our understanding of the relationship between reflective practice and organizational culture.

Lastly, the limitations of self-reported data are also acknowledged, although the interviews were intended to lessen self-reported data bias. Nevertheless, self-reported data have the advantage that individuals are far more knowledgeable of their own performance and thus, can detect differences in their behaviors to a greater degree than external raters (Parker & Collins, 2010).

CONCLUSIONS

The present study examined how L&D professionals engage in reflective practice in their respective workplaces, along with their perceptions of the workplace as being conducive to learning and reflection. They viewed reflective practice as two-dimensional, with the primary dimension focused on lessons learned from individual work projects and the other focused on personal individual efforts. The primary dimension appeared to be more subject to the bounding effects of organizational context, although participants were able to work around organizational barriers to reflective practice. Lastly, study participants had not yet addressed ways to measure the extent to which their reflective practices affect workplace performance. The study's contribution lies in identifying potential gaps between the conceptualization of reflective practice in the scholarly literature and what professionals say they do on the job. The findings also offer practical implications for organizations on ways of supporting reflective practice in the workplace and can help L&D professionals to better advocate for reflective practice as an essential tool for individual and organizational performance.

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APPENDIX

Table 1

Item Wording, Means and Standard Deviations

Item wording	M	SD
Reflective practice	4.71	0.64
RP1: I think it is valuable to take time to think critically about my work[a]	5.81	0.46
RP2: I meet with colleagues to debrief about work situations and projects[b]	5.01	1.05
RP3: I write about my work-related experiences in a diary, journal or blog[b]	2.85	1.72
RP4: I share my experiences and learning with others, so that they can learn from me and I can learn from their reactions[b]	4.89	1.24
RP5: I try out the ideas that I generate in practice, in order to see if my hypotheses work[b]	5.03	1.14
RP6: I regularly take time to think critically and creatively about my work because my organization rewards me[a]	3.78	1.49
RP7: I use financial and non-financial performance metrics in my work when I search for explanations and/or new ideas[a]	4.12	1.47
RP8: I try to learn from the challenges and troubling experiences I face at work[b]	5.62	0.66
RP9: I'm good at developing new ideas related to my work[b]	5.30	0.76
Learning culture[c]	4.14	0.93
LC1: In my organization, people are rewarded for learning	3.95	1.21
LC2: In my organization, people spend time building trust with each other	4.29	1.21
LC3: In my organization, teams/groups revise their thinking as a result of group discussions or information collected	4.38	0.98
LC4: My organization provides tools and technologies to make its lessons learned available to all employees	3.91	1.30
LC5: My organization recognizes people for taking initiative	4.34	1.08
LC6: My organization provides support for professional activities and events related to our work	4.38	1.09
LC7: In my organization, there is top management support for employee learning and development	4.39	1.36
LC8: My organization creates systems to measure gaps between current and expected performance	3.74	1.42
LC9: In my organization, leaders continually look for opportunities to learn	4.18	1.31
LC10: My organization works together with the outside community to meet mutual needs	3.92	1.45

[a]Adapted from "Reflective Practice as a Fuel for Organizational learning," by S. Hilden and K. Tikkamäki, 2013, Administrative Sciences, 3(3), p. 86 (https://doi.org/https://doi.org/10.3390/admsci3030076)

[b]Adapted from "Work Engagement, Moral Distress, Education Level, and Critical Reflective Practice in Intensive Care Nurses," by L.A. Lawrence, 2009, Doctoral dissertation, University of Arizona, pp. 170-172.

[c]Adapted from "Identifying Valid and Reliable Measures for Dimensions of a Learning Culture," by B. Yang, 2003, Advances in Developing Human Resources, 5(2), pp. 156-158 (https://doi.org/https://doi.org/10.1177/1523422303005002003)

Table 2
Inter-Item Correlation Matrix

	RP 1	RP 2	RP 3	RP 4	RP 5	RP 6	RP 7	RP 8	RP 9	LC 1	LC 2	LC 3	LC 4	LC 5	LC 6	LC 7	LC 8	LC 9	LC10
RP1																			
RP2	.29*																		
RP3	-.07	.22																	
RP4	.06	.63**	.32**																
RP5	.22	.23*	.11	.60**															
RP6	-0.20	.15	.37**	.26*	.11														
RP7	.06	.09	.19	.17	.29*	.42**													
RP8	.21	.21	.18	0.10	.22	.11	.18												
RP9	.25*	.17	.35**	.21	.26*	.22	.08	.29*											
LC1	.01	.22	.26*	.25*	.28*	.41**	.15	-.17	.09										
LC2	.15	.36**	.22	.34**	.42**	.27*	.25*	.07	.09	.68**									
LC3	.16	.29*	.07	.22	.29*	.25*	.01	.03	.03	.50**	.60**								
LC4	.08	.27*	.24*	.33**	.23*	.44**	.40**	-.01	.03	.44**	.52**	.35**							
LC5	.11	.24*	.03	.35**	.36**	.27*	.03	-.07	.18	.63**	.61**	.53**	.46**						
LC6	.06	.04	-.06	0.10	.15	.35**	0.10	-.24*	-.08	.39**	.22	.22	.26*	.42**					
LC7	.17	.28*	0.10	.25*	.25*	.33**	.16	-.05	.04	.59**	.51**	.41**	.40**	.63**	.73**				
LC8	.01	.17	.25*	.28*	.30**	.43**	.31**	.02	.07	.53**	.53**	.39**	.60**	.50**	.33**	.60**			
LC9	.06	.17	.17	.24*	.34**	.34**	.13	.02	.07	.68**	.65**	.57**	.41**	.72**	.40**	.69**	.76**		
LC10	-.05	.19	.28*	.38**	.37**	.37**	.29*	-.06	.12	.51**	.51**	.27*	.45**	.33**	.43**	.57**	.68**	.60**	

Note: N=73. *p <.05. **p <.01.

Table 3

Results from a Factor Analysis of the Reflective Practice and Learning Culture Survey Items

Survey item	Factor loading		
	1	2	3
Factor 1: Organizational Enablers			
LC9: In my organization, leaders continually look for opportunities to learn	**.87**	-.04	.01
LC5: My organization recognizes people for taking initiative	**.85**	.13	-.21
LC7: In my organization, there is top management support for employee learning and development	**.85**	-.09	-.03
LC1: In my organization, people are rewarded for learning	**.75**	-.06	.12
LC2: In my organization, people spend time building trust with each other	**.66**	.24	.03
LC6: My organization provides support for professional activities and events related to our work	**.65**	-.29	-.01
LC3: In my organization, teams/groups revise their thinking as a result of group discussions or information collected	**.62**	.17	-.14
LC8: My organization creates systems to measure gaps between current and expected performance	**.62**	-.07	.31
LC4: My organization provides tools and technologies to make its lessons learned available to all employees	**.42**	.07	.34
Factor 2: Collaborative Qualifiers			
RP2: I meet with colleagues to debrief about work situations and projects	.10	**.57**	.02
RP4: I share my experiences and learning with others, so that they learn from me and I can learn from their reactions	.10	**.57**	.18
RP5: I try out the ideas that I generate in practice, in order to see if my hypotheses work	.22	**.51**	.01
RP9: I'm good at developing new ideas related to my work	-.17	**.49**	.15
RP8: I try to learn from the challenges and troubling experiences I face at work	-.30	**.46**	.16
RP1: I think it is valuable to take time to think critically about my work	.08	**.45**	-.31
Factor 3: Tools and Techniques			
RP6: I regularly take time to think critically and creatively about my work because my organization rewards me	.16	-.11	**.75**
RP3: I write about my work-related experiences in a diary, journal, or blog	-.14	.22	**.56**
RP7: I use financial and non-financial performance metrics in my work when I search for explanations and/or new ideas	-.03	.09	**.49**

Note: N=73. The extraction method was principal axis factoring with an oblique (Promax with Kaiser normalization) rotation. Factor loadings above .40 are in bold.

Table 4

Thematic Analysis of Reflective Practice Interviews

Main theme	Sub-themes	Example quote
Project-based retrospection	Lessons learned	"I would define it as a practitioner that reflects on their work or a project after it's been done or throughout the project."
	Sharing with others	"We do debrief sessions with stakeholders or poll evaluation results from programs or other anecdotal feedback and personal feedback and compile it all and share that with stakeholders and other people involved in the program or project."
	Tools for retrospection	"I use OneNote to establish a notebook by project and then within that notebook, I'll keep track of time, lessons learned, best practices, that sort of thing."
Personal introspection	Self-examination	"I'm always evaluating because that's how you learn; if you don't reflect you cannot move forward, you're not growing and changing."
	Professional growth	"The reason why we should do it is because of personal growth; it's personal to you and I feel that when it's personal to you, you will recall and better apply or readjust what you want to do."
Organizational parameters	Time constraints	"It's not always easy, when you're moving at 100 miles an hour, to really step back and think and reflect on the work that you're doing, and how to improve, and how people are perceiving it or how it's impacting the business."
	Infrastructure	"I do think we have an infrastructure that can support collaboration, but I don't know if we use that very effectively in terms of sharing best practices, sharing thoughts from reflective practice."
	Culture	"I would say it depends on the organizational culture, especially management; they just don't get it, they don't understand reflection and how people learn."

Table 5

Integrated Results Matrix for Reflective Practice and Learning Culture

Research question	Quantitative result	Qualitative result	Example quote
RQ1: Reflective behaviors	When identifying specific behaviors, participants focused more on work-related interactions (Collaborative Qualifiers) than on personal, individual practices (Tools and Techniques)	When describing own reflective practices, participants perceive work-related interaction with others as project-based (Project Retrospection), versus internal thought processes for individual self-improvement (Personal Introspection)	Participant C03: "There's project-based reflective practice ... conducting an after-action report or meeting or something after a project is completed. The second area is more self-driven, not necessarily tied to a specific project."
RQ2: Organizational support	Participants appear to place more emphasis on organizational support (Organizational Enablers) for work-related interactions than on personal, individual practices	When describing the impact of their own organizational context (Organizational Parameters), participants perceived the need to capitalize on opportunities for reflection while working around any organizational constraints/barriers to reflective practice	Participant C02: "It's not as reflective as I'd like it to be … it's very reactive, this place is on fire and that place is on fire, so let's throw water wherever we can. In my group, we get on the phone together and spend 30 or 40 minutes every four or five weeks just chatting with each other about what's going on ... kind of communal reflections."

Research question	Quantitative result	Qualitative result	Example quote
RQ3: Impact on performance	When identifying reflective practices in which they engaged, participants focused on those practices that would directly impact job performance	When demonstrating the impact of reflective practice on workplace performance, most participants focused primarily on what worked (did not work) for a particular project	Participant B02: "Nothing concrete ... I feel we could get better at measuring the impact ... we hear anecdotally but it's not overt."