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A three-perspective approach to organizational learning culture: a systematic scoping review, conceptual clarification and extension, and an initial empirical investigation

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Learning is a central concern in contemporary organizations, but the cultural conditions that shape it are still conceptualized too narrowly. This paper challenges the prevailing view of organizational learning culture (OLC) as a unified and consensual construct, showing that this conventional understanding aligns primarily with an integration perspective on organizational culture. Building on Martin's three-perspective approach to organizational culture—integration, differentiation, and fragmentation—we extend OLC by arguing that learning-related meanings may be shared organization-wide, consolidated within subgroups, or remain ambiguous and situational. A systematic scoping review of 210 publications reveals that the field still lacks conceptual clarity. Most studies do not explicitly address their perspective, many either omit a clear definition of OLC or introduce idiosyncratic ones, frequently conflating OLC with related constructs such as the learning organization or organizational learning (OL). We therefore propose a conceptually clarified definition of OLC that distinguishes it from organizational learning and the learning organization while encompassing all three cultural perspectives. A mixed-method case study in a German bank illustrates substantial organization-wide agreement, modest but systematic cluster differences, and qualitative evidence of subgroup-specific as well as ambiguous and situation-dependent meanings. The three-perspective approach thereby provides theoretical, conceptual, and methodological contributions and encourages practitioners to examine coherence, subcultural variation, and ambiguity when fostering learning-oriented practices.

KEYWORDS

mixed-methods case study, organizational culture, organizational learning culture, qualitative analysis, systematic scoping review, three-perspective approach

1 Introduction

Learning is of key importance for organizations worldwide. In a dynamic and constantly changing economy, continuous and work-integrated learning is indispensable to

maintain and strengthen individual employability as well as organizational competitiveness (Beier et al., 2025; Decius et al., 2022; Kraiger and Ford, 2021). Only through continuous development and adaptation can businesses successfully meet the challenges and opportunities arising from technological advancements and changing market conditions (Vial, 2019). Traditional approaches to skill development have focused on training-based formal learning, mainly driven through the organization (Aguinis and Kraiger, 2009; Beier et al., 2025). However, when fast and continuous learning is required, this approach needs to be supplemented by more flexible and employee-driven forms of learning, namely informal learning (Decius et al., 2019) and self-regulated learning (Sitzmann and Ely, 2011; Graßmann et al., 2025). In this context, a clear framework for learning within organizations becomes even more important to facilitate learning. An organizational learning culture (OLC) provides such a framework by defining the values, norms, and structures that support and promote learning. An organizational learning culture that values continuous learning, knowledge exchange, and the application of new insights creates the foundation for both employees and organizations to grow and develop (Kortsch and Kauffeld, 2019; Marsick and Watkins, 2003).

Conceptually, it is important to distinguish organizational learning culture from adjacent constructs that are often used interchangeably in the literature (Tracey et al., 1995; Škerlavaj et al., 2007). This overlap has also become evident in prior reviews. For example, Xie's (2019) systematic review jointly examined research on organizational learning culture, the learning organization, and organizational learning (OL) and concluded that future studies should differentiate more carefully among these concepts. Similarly, Grohnert et al. (2022) identified substantial overlap in how organizational learning culture and related constructs are conceptualized and measured. This overlap is not a merely terminological issue. Reviews of the broader organizational learning literature have documented that the three concepts are frequently conflated, with "organizational learning" (OL) and "the learning organization" having historically been used synonymously before being separated into distinct research streams (Alerasoul et al., 2022).

Based on these different research streams, organizational learning culture has furthermore been operationalized in various ways, leading to the development of different measurement instruments, with the Dimensions of the Learning Organization Questionnaire (DLOQ; Marsick and Watkins, 2003) representing one of the most established and influential quantitative tools (Beyerlein et al., 2021). Studies that measure organizational learning culture using quantitative instruments, pursue interconnected aims (Marsick and Watkins, 2003): First, they aim at using a robust instrument to systematically compare organizational learning culture across organizations and to explore the relationship between organizational learning and performance outcomes. Second, these studies aim at enabling organizations to assess their current status as learning organizations and to guide targeted change efforts. By identifying strengths and areas for improvement across the measured key dimensions, the tools facilitate structured organizational development. These studies primarily aim at identifying shared perceptions and

values. What is therefore mostly neglected are differences or inconsistencies in cultural manifestations, values, and assumptions. This argument has also been brought forward by researchers in the area of organizational culture. Alvesson (2002), for example, points out that such instruments are poorly equipped to detect subcultural variation and ambiguity that frequently characterize cultural realities.

However, this issue has not yet been frequently addressed in the research on organizational learning culture (and also only rarely in learning climate research, with the exception of Schneider and Reichers, 1983) even though there were initial discussions that subcultural differences also exist regarding learning in organizations (Watkins and Kim, 2018). Furthermore, the definitions of organizational learning culture do not explicitly refer to aspects of variation or ambiguity. These issues have, however, been addressed in the literature of organizational culture in general. In her seminal work, Martin (1992) has drawn attention to the fact, that most studies only investigate culture from one specific perspective—most commonly the perspective also found in organizational learning culture research: the investigation of the shared manifestations, values and assumptions. She criticized this approach and pointed out that more perspectives can be used for studying culture. She developed a framework, which specifies three perspectives of investigating organizational culture: integration, differentiation, and fragmentation. The framework underscores that an organization's culture is not monolithic; instead, it is shaped by multiple perspectives that may coexist or conflict (Martin, 1992). The integration perspective views culture as shared across the organization, emphasizing consensus and cohesion. The differentiation perspective, on the other hand, focuses on the existence of subcultures that may align with different organizational units or employee groups, often leading to internal inconsistencies and conflicts. Finally, the fragmentation perspective highlights the lack of clear cultural consensus, reflecting the complexity and ambiguity experienced by individuals within the organization (Martin, 1992).

Viewing existing quantitative organizational learning culture research using instruments like the DLOQ (Marsick and Watkins, 2003) against the background of Martin's (1992) three-perspective approach, seems to suggest that these studies primarily reflect the integration perspective, by conceptualizing culture as a coherent system of shared values, assumptions, and practices. Inconsistencies or even ambiguity are not addressed. It is however unclear which other perspectives might have been used in other organizational learning culture research. As a first step, we therefore draw on Martin's (1992) three-perspective approach and apply it to the concept of organizational learning culture. In a second step, we investigate which perspectives have been used in organizational learning culture research so far. As a third step, we use the case of a German bank to illustratively demonstrate how Martin's (1992) three-perspective approach can be applied as a valuable theoretical lens for understanding employees' perceptions and engagement with their organizational learning culture. With this framework, we aim to explore organization-wide shared learning-related meanings (integration), identify potential coherent subgroup-specific patterns (differentiation), and examine ambiguous, situational, or conflicting interpretations that do

not consolidate into stable organization-wide or subgroup-level consensus (fragmentation) within the bank.

Our study therefore makes three main contributions to the literature on organizational learning culture (OLC). First, by applying [Martin's \(1992\)](#) three-perspective approach to organizational culture (integration, differentiation, fragmentation) to OLC, we extend the theoretical understanding of organizational learning culture beyond the dominant assumption of cultural unity. This approach offers a more nuanced lens for analyzing how learning values and practices coexist, diverge, or even conflict within organizations. Second, through a scoping review of OLC, we provide a comprehensive overview of how the construct has been understood to date. This analysis enhances conceptual clarity, identifies overlaps and inconsistencies, and offers a clearer foundation for future theorizing and measurement. Thirdly, the case shows how using the three perspectives deepens our understanding of OLC as it reveals diverse learning realities across and within organizational groups.

The remainder of the paper follows a tightly linked three-step logic. First, we provide a structured synthesis of how OLC has been defined and operationalized in prior research and assess which of [Martin's \(1992\)](#) three perspectives these conceptualizations implicitly assume. Second, we build on this synthesis to propose a comprehensive three-perspective definition of OLC and derive implications for studying heterogeneity with regard to learning culture. Third, we illustrate the empirical value of this approach in a mixed-method case study, showing how integration, differentiation, and fragmentation can be diagnosed within one organization and how each perspective adds distinct interpretive value.

2 Theoretical background

2.1 Distinguishing organizational learning culture, organizational learning, and the learning organization

Although organizational learning culture, organizational learning, and the learning organization are frequently discussed together, they refer to analytically distinct phenomena. This distinction has developed gradually. Organizational learning and the learning organization were initially often used interchangeably, but later evolved into separate research streams ([Alerasoul et al., 2022](#); [Örtenblad, 2001](#)). Organizational learning refers to the processes through which information and experience are acquired, interpreted, retained, and translated into changes in organizational knowledge or practice ([Huber, 1991](#); [Slater and Narver, 1995](#)). It therefore addresses the question of how learning occurs in and by organizations.

The learning organization, in contrast, has been described as a broader normative ideal or organizational configuration. It describes an organization in which learning processes are deliberately facilitated, systematically embedded, and considered unusually effective ([Alerasoul et al., 2022](#); [Örtenblad, 2001](#)). Whereas, organizational learning can occur in any organization and may produce either functional or dysfunctional outcomes,

the learning organization denotes a desirable organizational form or developmental state characterized by sustained support for learning.

Organizational learning culture is therefore not equivalent to organizational learning or the learning organization. Building on organizational culture theory ([Schein, 2010](#)) and recurring conceptualizations in prior OLC research ([Marsick and Watkins, 2003](#); [Škerlavaj et al., 2007](#); [Tracey et al., 1995](#)), we derive a preliminary working conceptualization of OLC as the cultural context of learning: a system of learning-related assumptions, values, norms, and artifacts that shapes how learning processes are interpreted and enacted. [Alerasoul et al. \(2022\)](#) similarly locate learning orientation, a related but narrower construct, in the values and mental models that influence proactive learning. Their review thus further underscores the relevance of a cultural dimension within the wider organizational learning field, although learning orientation is conceptually narrower than the broader OLC construct examined in the present study.

[Basten and Haamann's \(2018\)](#) review reinforces this process–context distinction by mapping concrete organizational learning approaches across people, processes, and technologies. They emphasize that these approaches need to be aligned with organizational culture and organizational processes. Culture is therefore not simply another organizational learning activity but part of the context in which learning activities are selected, interpreted, combined, and implemented.

The relationships between these constructs can be reciprocal. Organizational learning culture may facilitate or inhibit organizational learning processes, while sustained learning processes and organizational changes may, in turn, reproduce or transform the learning culture. When learning-supportive cultural, structural, and processual conditions become systematically embedded, an organization may increasingly approximate the ideal of a learning organization.

2.2 Martin's (1992) three-perspective approach: cultural and multilevel foundations

The concept and boundaries of organizational culture remain debated (e.g., [Bogale and Debela, 2024](#); [Denison, 1996](#)). [Martin's \(1992\)](#) three-perspective approach provides an influential framework for systematizing different ways of analyzing cultural phenomena. Against the background of debates between functionalist and interpretive understandings of culture ([Smircich, 1983](#)), the approach distinguishes integration, differentiation, and fragmentation as three analytical perspectives that direct attention to different patterns of consensus, consistency, and ambiguity within organizations.

The integration perspective emphasizes the existence of shared values, unified interpretations, and consistent norms across an organization. From this viewpoint, culture is seen as a cohesive system that binds members together and guides behavior toward common goals ([Schein, 2010](#)). Studies adopting this perspective search for organization-wide consensus and consistency among cultural manifestations. Ambiguity is generally excluded, treated as

a temporary disturbance, or resolved by identifying an underlying level of cultural coherence. Culture is consequently represented as a relatively clear and stable domain shared by organizational members (Martin, 1992).

The differentiation perspective challenges the assumption of organization-wide consensus by viewing organizations as constellations of multiple subcultures that coexist, sometimes in harmony but often in tension (Trice and Beyer, 1993). Consensus and consistency are assumed primarily within these subcultures rather than across the organization as a whole. Their values, interpretations, and practices may differ systematically. The subcultures may coexist harmoniously, remain largely separate, or come into tension. Conflict is therefore possible but is not a necessary defining characteristic of differentiation. The central pattern is the combination of within-group coherence and between-group cultural differences. Ambiguity is “channeled” outside the boundaries of comparatively coherent subcultures rather than eliminated entirely (Martin, 1992, p. 12).

The fragmentation perspective moves beyond both integration and differentiation by acknowledging the inherent ambiguity, fluidity, and multiplicity of cultural meanings (Martin, 1992, 2002). Consensus and consistency are understood as temporary and situational, and issue-specific; meanings are continuously negotiated and subject to change. Ambiguity is treated as a central feature of cultural analysis rather than as a residual problem to be resolved. Organizational members may agree on one issue but interpret another in divergent or shifting ways. Cultural meanings therefore do not necessarily converge into either organization-wide consensus or persistent subgroup patterns. Martin (1992, p. 130) characterizes the fragmentation perspective through its “focus on ambiguity, complexity of relationships among manifestations, and a multiplicity of interpretations that do not coalesce into a stable consensus.”

The three perspectives should not be understood as mutually exclusive types of organizational cultures. Rather, they represent complementary analytical lenses that reveal different patterns of cultural meaning. The same organization may display broad consensus regarding one cultural issue, coherent subgroup differences regarding another, and ambiguous or shifting interpretations regarding a third. Considering the three perspectives together can therefore provide a richer understanding of organizational culture than relying exclusively on assumptions of organization-wide coherence (Martin, 1992; McDonald and Foster, 2013). An early empirical application by Harris and Ogbonna (1998) illustrates this analytical value. Across three retail organizations, head-office personnel tended toward integration-consistent interpretations, store managers toward differentiation-consistent interpretations, and shop-floor employees toward fragmentation-consistent interpretations. Their findings demonstrate that the three perspectives can reveal distinct cultural realities associated with different organizational groups and hierarchical positions. This group-related pattern also anticipates the multilevel question of when differences between organizational groups can be interpreted as culturally meaningful.

Martin’s (1992) three-perspective approach complements other influential approaches to organizational culture. Whereas, Schein’s (2010) framework primarily distinguishes levels at which culture becomes manifest—artifacts, espoused beliefs and values,

and basic underlying assumptions—Martin’s approach focuses on how cultural meanings are distributed within organizations. It asks whether meanings are broadly shared, coherently organized within subcultures, or characterized by ambiguity and shifting interpretations. The two approaches therefore address complementary questions concerning the content and distribution of cultural meanings.

This focus on the distribution of meanings connects Martin’s approach to broader organizational culture and climate scholarship. Schneider et al. (2013, 2017, 2025) emphasize that claims about organizational properties require researchers to specify what is shared, by whom it is shared, and with what degree of stability. Martin’s three perspectives differentiate possible configurations of such sharedness: organization-wide consensus, subgroup-level consensus accompanied by between-group differences, and issue-specific or unstable patterns of interpretation.

These distinctions also have direct implications for the level of analysis. Researchers cannot infer an organization-level cultural property simply by collecting and averaging individual perceptions. They need to specify the focal level of the construct and the theoretical process through which individual accounts are assumed to form a higher-level cultural pattern (Klein et al., 1994; Rousseau, 1985). From an integration perspective, an organizational-level claim presupposes relatively broad agreement. From a differentiation perspective, agreement may be comparatively strong within culturally meaningful subgroups while interpretations differ systematically between them. From a fragmentation perspective, patterns of agreement may be temporary, issue-specific, or cross-cutting and may not correspond to stable organizational units.

Multilevel composition approaches formalize alternative ways of connecting individual perceptions to higher-level constructs and clarify that agreement, subgroup differences, and dispersion may carry different theoretical meanings (Chan, 1998, 2014). Where individual perceptions are summarized at a higher level, agreement and aggregation statistics can provide empirical support for such inferences (Bliese, 2000). Statistical patterns do not, however, determine the cultural perspective on their own. Differences between group means are not sufficient evidence of subcultures unless the groups represent theoretically meaningful cultural boundaries and the findings are consistent with within-group coherence. Likewise, individual-level variance or low agreement may indicate heterogeneity but does not by itself establish fragmentation. Fragmentation requires substantive evidence of ambiguous, situational, unstable, or cross-cutting interpretations.

These cultural and multilevel considerations provide the basis for applying Martin’s (1992) three-perspective approach to organizational learning culture.

2.3 Applying Martin’s (1992) three-perspective approach to organizational learning culture

Building on Martin’s (1992) three-perspective approach, we apply integration, differentiation, and fragmentation as complementary analytical lenses to the conceptualization and investigation of organizational learning culture. The three

perspectives illuminate different patterns through which learning-related meanings may be shared across an organization, consolidated within subgroups, or remain ambiguous and situational. Applying them to OLC therefore concerns not only the substantive content of learning-related assumptions, values, and norms but also the level and pattern at which these meanings are shared. Table 1 summarizes the defining characteristics of these perspectives as applied to the study of OLC.

From the *integration perspective*, organizational learning culture is viewed as a coherent, organization-wide system of shared meanings and values related to learning. This view assumes a high degree of consensus among organizational members regarding the importance of learning, the norms that guide it, and the practices that support it. It assumes that organizational members largely agree on what learning means, how important it is, and how learning is enacted within the organization. Research adopting this perspective therefore seeks common learning-related patterns, such as shared commitments to continuous improvement, reflection, feedback, and knowledge exchange. Quantitative instruments such as the DLOQ are compatible with an integration perspective when their scores are interpreted as representing a shared organizational or unit-level learning culture (Marsick and Watkins, 2003; Watkins and O'Neil, 2013). Such an interpretation, however, requires more than calculating an overall mean. It presupposes a theoretically justified level of analysis and sufficient evidence that the perceptions being combined reflect a degree of sharedness.

Without such evidence, an aggregated score may conceal systematic subgroup differences or ambiguous interpretations.

In contrast, the *differentiation perspective* recognizes that organizational learning culture may vary across subgroups within the organization. Subcultures—such as departments, hierarchical levels, or professional communities—may each hold distinct, internally consistent understandings of learning, while differing in their values, priorities, or interpretations. For example, one unit may emphasize experimentation and informal knowledge exchange, whereas another may associate learning primarily with formal qualification or regulatory compliance. The differentiation perspective therefore directs attention to the combination of within-group coherence and between-group differences. Differences in group means alone do not establish the existence of learning subcultures. The groups need to represent theoretically meaningful cultural boundaries, and the empirical pattern should be consistent with some degree of sharedness within the respective groups.

The *fragmentation perspective* moves beyond both integration and differentiation by emphasizing ambiguity and fluidity as inherent features of culture. From this view, organizational learning culture is understood as a dynamic and constantly negotiated set of meanings that may be inconsistent, transient, and situational. Employees may encounter conflicting expectations about whether learning is encouraged, which forms of learning are considered legitimate, or how learning relates to performance, workload, and

TABLE 1 Three perspectives on organizational learning culture (OLC) (based on Martin, 1992, p. 96).

Category	Integration	Differentiation	Fragmentation
Orientation toward consensus	High consensus: conceptions about learning (e.g. meaning and importance) are perceived as a coherent, unified system of shared meanings, values, and guiding principles. They are considered normative expectations	Subcultural consensus: consensus regarding the conceptions about learning exists within subgroups (e.g., departments, functions) but not across the organization. Learning expectations differ according to relevant contexts and leadership practices	No stable consensus: a multiplicity of views exists and the conceptions about learning vary situationally. Organizational actors interpret learning individually, often shaped by immediate demands or personal interests
Relation among manifestations	Manifestations of OLC (e.g., programs, rituals, tools, communication, symbols) appear coherent and mutually reinforcing. Formal and informal learning practices are aligned and reflect overarching organizational values	Manifestations differ across subunits. They are shaped by varying leadership approaches and context conditions, resulting in distinct learning subcultures	Manifestations show complex, non-consistent relationships, sometimes conveying contradictory messages about learning. Different learning practices coexist without alignment
Orientation to ambiguity	Ambiguity is excluded or minimized through standardized approaches to learning. Learning is framed as a manageable activity	Ambiguity is acknowledged between subcultures. Each subgroup is perceived as internally consistent but different from others	Ambiguity is accepted as inherent in OLC. Members hold shifting views, fluid, paradoxical, and context-dependent, reflecting uncertainty as a normal feature of organizational life
Who shares?	The organization as a whole. Learning-related norms and values are communicated through central platforms, corporate communication, and leadership rhetoric	Primarily subgroups such as departments or teams. Shared meanings of learning depend on local leadership engagement and peer support	Individual actors or informal networks. Learning meanings are situationally constructed and not anchored in shared frames of reference
What does it mean for OLC?	OLC appears cohesive and governable. It supports orientation and organizational alignment but risks over-formalization and normative rigidity	OLC is segmented. Subcultural variation allows contextual adaptation and innovation but also produces unequal learning opportunities and fragmented knowledge flows	OLC is fluid and emergent. It fosters autonomy and responsiveness, yet may lead to disorientation and inconsistent expectations

compliance. Their interpretations may shift depending on the issue, situation, organizational event, or interaction partner. OLC consequently appears as a web of partially overlapping, temporary, and sometimes contradictory meanings rather than as either one coherent culture or a stable set of subcultures.

Individual differences or high dispersion in OLC perceptions may indicate cultural heterogeneity but are not sufficient evidence of fragmentation. Fragmentation requires substantive indications that learning-related meanings are ambiguous, situational, unstable, or cross-cutting and that they do not consolidate into persistent organization-wide or subgroup-level consensus. This distinction is particularly important when quantitative dispersion is used as an initial diagnostic indicator and subsequently interpreted together with qualitative evidence.

Taken together, these three perspectives provide a multidimensional lens for conceptualizing organizational learning culture. The integration view highlights coherence and shared understanding, the differentiation view reveals subcultural diversity, and the fragmentation view uncovers the ambiguity and fluidity of meaning-making in learning processes. These perspectives should remain analytically distinguishable and should not be subsumed into a single overarching cultural description; it should be noted that all three patterns can coexist within the same organization and may manifest in connection with different learning-related topics.

3 How organizational learning culture is defined to date—a systematic scoping review

Based on the interest of research and practice in the topic of organizational learning culture, it could be expected that there is conceptual clarity as well as an accepted definition among scholars. Investigating the existing research, however, suggests a different picture: The definitions of organizational learning culture vary. In order to explicate which definitions of organizational learning culture can be found in the literature and which perspective according to [Martin \(1992\)](#) is reflected in them, we conducted a systematic scoping review to ensure that we obtained as comprehensive a picture as possible of the use of the construct “organizational learning culture”.

3.1 Review design and search strategy

We conducted a systematic scoping review to examine how organizational learning culture (OLC) and conceptually adjacent constructs have been labeled, defined, and operationalized, and to assess which assumptions underlying this body of literature are compatible with [Martin's \(1992\)](#) three cultural perspectives. The scoping review design was chosen because the objective was to clarify conceptual boundaries, map heterogeneous research practices, and identify how a construct has been studied across a broad literature, rather than to answer a narrowly specified effectiveness question or synthesize effect

estimates ([Munn et al., 2018](#)). Reporting follows the PRISMA Extension for Scoping Reviews (PRISMA-ScR; [Tricco et al., 2018](#)). The completed PRISMA-ScR checklist is provided in the [Supplementary Material S1](#).

Searches were conducted in Scopus, Web of Science, and EBSCOhost. Within EBSCOhost, Business Source Ultimate, Academic Search Ultimate, and the Psychology and Behavioral Sciences Collection were searched. Searches were conducted between 20 and 26 January 2026; exact search dates, database-specific search strings, applied filters, and record counts are provided in [Supplementary Material S2](#). Search strings combined American and British spelling variants of organizational learning culture with close alternative labels, including learning organization culture, learning organization culture, and continuous-learning culture. The standalone phrase “learning culture” was not used as an independent search term.

3.2 Study selection

Records situated exclusively in schools, universities, or other formal educational contexts were removed before title and abstract screening, as the review concerns learning cultures in employing organizations outside of educational contexts ($n = 178$; 456 remaining). Title and abstract screening excluded a further 88 records, leaving 368 for full-text retrieval. Of these, 53 could not be retrieved (52 full texts unobtainable; 1 accessible only as a partial text); 315 records were assessed for eligibility. After full-text screening, 105 were excluded. The final corpus comprises 210 publications.

A publication was eligible when it addressed OLC or a closely related learning-culture construct as a substantive conceptual or empirical variable and provided sufficient information to identify its definition, conceptual basis, operationalization, or treatment of culture. Publications were excluded when learning-culture terminology appeared only incidentally or rhetorically, when the focal construct was organizational learning or the learning organization without a discernible cultural component, or when the full text was not available in English. Eligible publication types included peer-reviewed journal articles, scholarly book chapters, full conference papers, doctoral dissertations, and evidence-synthesis publications such as systematic reviews and meta-analyses. Master's and MBA theses, entire edited volumes, abstract-only records, and non-scholarly publications were excluded. Reviews and meta-analyses were included because they may provide substantive definitions, conceptual distinctions, and syntheses of measurement practices relevant to the review questions.

The unit of analysis was the individual publication. Publications belonging to the same research program were retained when they reported distinct samples, analyses, or substantive contributions and were marked as a publication family. Substantively identical versions, reprints, and exact duplicate records were represented by the more complete or definitive publication.

Before the main full-text screening, two authors of the manuscript independently assessed a calibration set of 20 publications. The set comprised eight records that had been

classified as borderline or disputed during title-and-abstract screening, eight records jointly included at that stage, and four records jointly excluded. The reviewers reached identical eligibility decisions for all 20 publications. The remaining full texts were allocated to one reviewer per publication. Reviewer identifiers, screening dates, page-specific anchors, and reasons for exclusion or inclusion were recorded in the screening file.

3.3 Data extraction and coding

For each included publication, we extracted: (a) the exact primary label used for the focal construct, clustered into term families (i.e., *organizational learning culture*, *learning culture*, *learning organization culture*, *continuous-learning culture*, *adjacent* or *unclear*); (b) definitional treatment, coded as explicitly cited definition, adapted or synthesized definition, implicit conceptualization, operationalization only, or no identifiable definition; (c) the measurement instrument or instrument family; and (d) compatibility with Martin's (1992) three cultural perspectives. The coding scheme and decision rules are provided in [Supplementary Material S4](#).

Data extraction began during full-text screening, when reviewers recorded structured notes, page-specific anchors, and relevant excerpts concerning construct labels, definitions, measurement, and perspective-related evidence. During synthesis, OpenAI GPT-5.5 Thinking and Claude Sonnet 4.6 supported secondary structuring, standardization, and cross-checking of this human-generated material. The systems produced provisional classifications based on the screening notes and, where available, verbatim excerpts. The first author verified divergent, low-confidence, construct-boundary, bibliographic, and perspective-sensitive cases against the documented source passages and, where necessary, the complete publication. All final coding decisions remained with the authors.

A publication was coded as *integration*-compatible when it conceptualized learning culture as an organization-wide system of shared values, assumptions, norms, or practices, or when it represented OLC through a single undifferentiated score without examining systematic internal variation. This classification does not imply that the authors of the respective publication explicitly drew on Martin's integration perspective; in most cases, it follows from the organizational scope assumed in the definition or measurement approach. A *differentiation* code required explicit attention to culturally distinct organizational subgroups or units, or evidence consistent with subgroup-level cultural coherence and between-group differences; comparisons of group means alone were not treated as sufficient. A *fragmentation* code required an explicit focus on ambiguity, unstable or situation-dependent meanings, or shifting patterns of consensus; individual-level variance was not coded as fragmentation. Cases in which the available evidence was insufficient for a confident classification were retained as not classifiable. The coding scheme and decision rules are provided in [Supplementary Material S4](#); the decision log and full-text verification notes were retained in the internal audit file.

3.4 Results

3.4.1 Search and selection of publications

The database searches identified 956 records: 371 from Scopus, 349 from Web of Science, and 236 from EBSCOhost. After the removal of 322 duplicate records and 178 records referring to educational rather than non-educational organizational contexts, 456 records underwent title-and-abstract screening. Of these, 88 were excluded and 368 reports were sought for retrieval. Fifty-three reports could not be assessed, because 52 full texts could not be obtained and one record was available only as an incomplete text. Consequently, 315 reports were assessed for full-text eligibility.

A total of 105 reports were excluded during full-text screening. The main reasons were an incidental or merely rhetorical reference to learning culture ($n = 55$), the absence of a discernible cultural component or use of a different focal construct ($n = 14$), a non-English full text ($n = 23$), duplicate publication or reprint ($n = 7$), publication as a master's or MBA thesis ($n = 2$), retraction ($n = 2$), or other insufficient information ($n = 2$). The final corpus comprised 210 publications (see [Figure 1](#)).

3.4.2 Publication characteristics

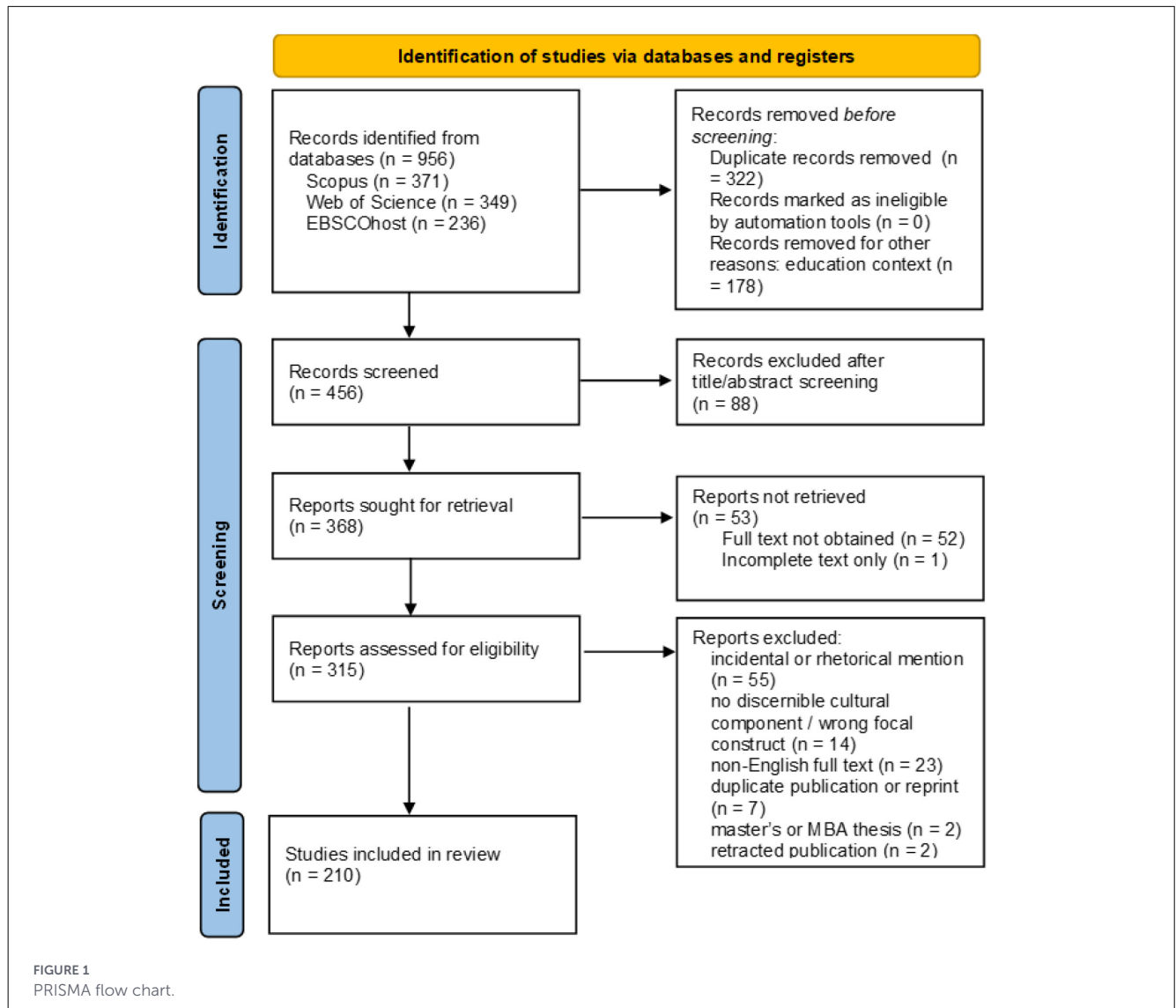
The 210 included publications were published between 1994 and 2026. Publication activity increased markedly over time: four publications appeared before 2000, 29 between 2000 and 2009, 80 between 2010 and 2019, and 97 from 2020 onward. The highest annual output occurred in 2024 ($n = 23$), followed by 2023 ($n = 18$), 2022 ($n = 17$), and 2021 ($n = 16$). The two publications dated 2026 represent only records available by the final database searches in January 2026.

Most included publications were journal articles ($n = 185$, 88.1%). The corpus further comprised 11 completed doctoral dissertations or doctoral studies (5.2%), 10 full conference proceedings papers (4.8%), and four scholarly book chapters (1.9%).

The publications were dispersed across a wide range of outlets. The most frequent source was *The Learning Organization* ($n = 8$), followed by *Human Resource Development International* and *Human Resource Development Quarterly* ($n = 6$ each), *European Journal of Training and Development* ($n = 5$), and *Journal of Workplace Learning* ($n = 4$). The three most frequent journals together accounted for only 20 publications (9.6% of the corpus), and no journal contributed more than eight publications. Thus, OLC research is distributed across a broad and interdisciplinary journal landscape.

3.4.3 Terminology and construct boundaries

The most frequent term family was organizational learning culture ($n = 127$, 60.5%), followed by learning culture ($n =$



33, 15.7%), learning organization culture ($n = 28$, 13.3%), and continuous-learning culture ($n = 9$, 4.3%). Thirteen publications (6.2%) used labels or conceptualizations that were classified as adjacent or unclear. Fifteen publications were identified as explicit construct-boundary cases.

Despite this terminological diversity, the publications commonly described OLC in terms of shared values, beliefs, norms, and organizational practices that support learning, knowledge exchange, experimentation, and the application of acquired knowledge. However, the relationship between OLC, organizational learning, and the learning organization was frequently left implicit or inconsistently specified. This concern was also explicitly raised in two overview contributions included in the corpus. Xie (2019, p. 95) concluded that research should “differentiate carefully among the concepts of OLC, LO, and OL,” while Grohnert et al. (2022) documented substantial overlap in the labels and operationalizations used for OLC and adjacent constructs.

3.4.4 Definitions and conceptualizations

The publications varied considerably in how explicitly they conceptualized the focal construct. In our coding, 95 publications provided an explicit definition attributed to one or more cited sources. Sixty-five publications adapted or synthesized existing definitions, whereas 32 conveyed an implicit conceptualization through their theoretical description of learning-supportive values, norms, or practices. Fifteen publications operationalized the construct without providing a discernible conceptual definition, and three contained no sufficiently clear definition.

Definitions drew on several overlapping intellectual traditions. Recurring conceptual anchors from the learning-organization literature included Senge (1990), Watkins and Marsick (1993), Garvin (1993), Marsick and Watkins (2003), and Yang et al. (2004). Organizational-culture foundations were represented particularly by Schein (1992), while OLC-specific formulations frequently drew on Tracey et al. (1995), Egan et al. (2004), Bates and Khasawneh (2005), and Škerlavaj et al. (2007).

These sources were not used uniformly, however. Some publications emphasized shared values, beliefs, and norms, whereas others focused more strongly on learning practices, processes, and structural arrangements. Still others drew primarily on the learning-organization literature and consequently equated OLC, at least partly, with the characteristics of a learning organization. Conceptual overlap was therefore not limited to terminology but extended to the substantive content assigned to the construct.

3.4.5 Operationalization and construct overlap

The DLOQ was the dominant instrument family and was identified in 117 publications. Of these, 76 publications were classified within the organizational learning culture term family, 20 within learning organization culture, 14 within learning culture, and seven within the adjacent or unclear category. Thus, the same instrument family was used under several different construct labels. For example, the DLOQ was used to operationalize organizational learning culture by [Hung et al. \(2010\)](#), learning organization culture by [Dirani \(2009\)](#), and learning culture by [Acar et al. \(2022\)](#). Conversely, publications using the same label sometimes relied on different instruments or study-specific operationalizations. For instance, studies referring to organizational learning culture used not only the DLOQ but also other established or author-developed measures (e.g., [Muafi and Johan, 2022](#); [Otoo, 2024](#)). Measurement practices therefore reinforced the conceptual overlap observed at the level of terminology and definitions: neither a shared label necessarily indicated an equivalent operationalization, nor did the use of the same instrument imply a consistent construct label.

3.4.6 Cultural perspectives

The literature overwhelmingly reflected an approach toward investigating OLC that can be subsumed under what [Martin \(1992\)](#) described as an integration perspective. OLC was generally treated as an organization-wide and internally coherent property based on shared learning-related values, norms, and practices. Under the conservative coding criteria applied in this review, 208 publications were classified as primarily integration-compatible. A supplementary search of the full-text pdf files was conducted using “Martin” as the search string. It further confirmed that Martin’s three-perspective framework is virtually absent from the corpus: of the 121 publications in which Martin appeared as an author name, only four explicitly cited her work on organizational culture, and none invoked the three-perspective framework directly.

Two publications made culturally distinct organizational subgroups or units central to their conceptualization and were therefore classified as differentiation-compatible. [Shamir-Bladerman \(2021, p. 431\)](#) argued that organizational units are not structurally and functionally identical and that individual hospital departments may consequently be characterized by different subcultures. [Park \(2011\)](#) treated headquarters and foreign subsidiaries as culturally distinguishable organizational units and examined their cultural similarity as a determinant of intra-organizational knowledge transfer. Some further publications mentioned possible departmental subcultures or reported

differences in OLC perceptions between hierarchical groups, but they continued to conceptualize OLC primarily as an organization-wide characteristic and did not analyze the groups as distinct cultural communities.

No publication met the criteria for a primary fragmentation perspective. In particular, the literature did not systematically conceptualize OLC as characterized by unstable interpretations, issue-specific consensus, or persistent ambiguity. Overall, the findings indicate that existing OLC research does not explicate the respective perspective that is assumed in the investigation of organizational culture. Rather, it rests predominantly on implicit assumptions of coherence, shared meaning, and organization-wide consensus as the manifestations of organizational culture.

3.5 Conclusion: toward a clarified and extended definition of OLC

In summary, the findings of the systematic scoping review indicate that, despite the increasing attention the concept has received, OLC remains conceptually inconsistent and lacks a widely accepted definition. The literature draws most frequently on the learning-organization tradition represented by Watkins and Marsick, Garvin, Senge, and Yang and colleagues, alongside the organizational-culture tradition represented by Schein. Across these different intellectual traditions, OLC is predominantly portrayed as an organization-wide and internally coherent system of values, norms, and practices that supports learning.

This conceptualization corresponds primarily to [Martin’s \(1992\)](#) integration perspective. Of the 210 publications examined, 208 were classified as integration-compatible. Only [Shamir-Bladerman \(2021\)](#) and [Park \(2011\)](#) made culturally distinguishable organizational subgroups or units central to their analyses and were therefore classified as differentiation-compatible. No publication adopted fragmentation as its primary cultural perspective. Existing OLC research consequently provides a highly selective account of organizational culture, emphasizing coherence and organization-wide consensus while giving little attention to subcultural differentiation and virtually none to ambiguity, contestation, or issue-specific patterns of consensus.

Based on these findings and building on [Martin’s \(1992\)](#) three-perspective approach, we propose the following comprehensive and conceptually clarified definition of Organizational Learning Culture:

Organizational Learning Culture refers to the system of assumptions, values, norms, and artifacts that shape how learning is interpreted, enacted, and supported within an organization. These cultural meanings may be shared across the organization, consolidated within subgroups, or remain ambiguous, situational, and contested.

This definition retains values, norms, assumptions, and artifacts such as learning-supportive practices emphasized in the existing literature as key defining elements while extending the construct beyond an exclusively integrative understanding of culture. It

recognizes that learning-related meanings may be characterized by organization-wide consensus, coherent subcultural differences, or issue-specific and shifting patterns of interpretation. The three perspectives should not be treated as mutually exclusive; rather, they offer complementary analytical lenses through which different manifestations of OLC may become visible. Additionally, this definition refrains from conceptual conflation by excluding implicit references to an ideal organizational state or learning processes themselves. It therefore clarifies that organizational learning cultures may foster or constrain learning in organizations by shaping how learning processes and arrangements are interpreted and enacted.

4 Applying the three-perspective approach to OLC—a case study

The banking sector in Germany has faced significant challenges over the past decade, driven by technological advancements and increasing competition (Saravia, 2021). This environment of rapid change has put pressure on financial institutions to continuously adapt and evolve, which also requires their employees to engage in ongoing learning and development (Hall et al., 2018). As the German banking sector comprises diverse institutional pillars (e.g., public-law banks and private banks), each characterized by distinct structural and operational approaches, the sector's organizational learning culture becomes a critical factor for understanding how these institutions adapt to regulatory, digital, and market challenges (Saravia, 2021; Deloitte, 2015).

Therefore, the aim of this case study is to (a) apply the three-perspective view on OLC to a company, and (b) gain insight into the value of this multi-perspective view for practitioners. This medium-sized bank provides a fertile ground for examining subcultures within the broader organizational learning culture. With around 700 employees, the institution is large enough to exhibit diverse departmental cultures but remains sufficiently compact for comprehensive study (Deloitte, 2015).

Building on Martin's (1992) three-perspective approach to examine how organizational learning culture manifests in the bank, the following research questions guide our investigation:

1. Which aspects of the organizational learning culture are shared across the organization (Integration)?
2. Which organizational learning subcultures can be identified within the organization, and how do they differ (Differentiation)?
3. How do individual perceptions of organizational learning culture vary, reflecting ambiguity and shifting views (Fragmentation)?

4.1 Research design and participants

The case study was part of an organizational development process with the goal of establishing an organizational learning culture. In this study we employed a mixed-method approach,

integrating quantitative data from a standardized employee survey with 436 employees participating (overall response rate: 63%) and qualitative data from 19¹ semi-structured interviews with employees from various departments. The sample characteristics of the participants of the employee survey are displayed in Table 2. Of the 427 participants for whom gender data are reported (excluding Cluster 7, $n = 9$, due to small-sample identification risk), 216 identified as female (50.6%), 175 as male (41.0%), and 36 selected *divers*, *none*, or did not respond to the gender item (8.4%). The age distribution was primarily concentrated in the 35–44 age range.

The organizational case study followed a convergent mixed-methods design with partially concurrent data collection. Survey data were collected between 1 and 28 February 2023, while the semi-structured interviews were conducted on 22 and 28 February and 7 and 13 March 2023. The quantitative and qualitative strands were analyzed separately and brought together during the interpretive phase to examine convergence, complementarity, and tensions across the three cultural perspectives. Because the employee survey was anonymous, individual survey responses could not be linked to interview participants. Some overlap between the samples is likely but could not be established empirically.

4.2 Questionnaires and interviews

The employee questionnaire used the German version of the Dimensions of the Learning Organization Questionnaire (DLOQ), originally developed by Marsick and Watkins (2003) and adapted and validated in German by Kortsch and Kauffeld (2019). The DLOQ contains 21 items, with three items for each of seven dimensions (Table 3). Responses were given on a five-point scale from 1 (strongly disagree) to 5 (strongly agree). McDonald's ω ranged from 0.65 to 0.83 and Cronbach's α from 0.64 to 0.83 across dimensions; Systems to Capture Learning showed the lowest reliability ($\omega = 0.65$, $\alpha = 0.64$). The 21-item total score showed high internal consistency ($\omega = 0.93$, $\alpha = 0.93$). Age category, gender, and organizational-cluster membership were also collected.

The interviews were conducted using a semi-structured guide based on the DLOQ framework, with additional open-ended questions to explore individual experiences and perceptions of organizational learning culture.

4.3 Data analysis

4.3.1 Quantitative analysis

Quantitative analyses were conducted in R (version 4.3.1) using RStudio. After applying the predefined completion and data-quality criteria, 436 survey responses were retained. Reliability estimates and organization-wide descriptive and agreement analyses were based on this full quality-screened sample. Analyses comparing

¹ 20 guided interviews with representatives of different organizational units, status groups and company affiliations were conducted. However, one individual did not consent to the use of their interview, resulting in the final analysis including only 19 interviews. The data from the 20th interview were not used in the study.

TABLE 2 Sample characteristics and no. of questionnaires by cluster.

Cluster number and cluster name	Survey respondents, <i>n</i> (response rate)	Age (most frequent category)	Gender, <i>n</i> (male/female/diverse or no response)	Number of Interviews included in the analysis
C1: retail banking and customer service	124 (61%)	35–44 years	36/82/6	3
C2: corporate and private banking	97 (76%)	35–44 years	57/35/5	4
C3: specialized sales and partnerships	23 (42%)	35–44 years	14/5/4	2
C4: talent development and early careers	29 (55%)	15–24 years	14/13/2	3
C5: operations, risk and compliance	80 (55%)	35–44 years	31/36/13	2
C6: corporate services and support functions	59 (74%)	35–44 years	20/36/3	3
C7: executive management and governance	9 (50%)	45–54 years	n/a (sample too small)	2
Unassigned/other	15	25–34 years	3/9/3	–
Total	436 (63%)		175/216/36	19

Gender data reported for $n = 427$ (all clusters except Cluster 7, $n = 9$, which is excluded due to small-sample identification risk). 'Diverse or no response' includes response options *divers*, *none*, and missing responses. Response rate is based on all eligible employees per cluster regardless of gender reporting.

TABLE 3 DLOQ dimensions, sample items, and reliability estimates.

Dimension	Sample item	Reliability	
		McDonald's ω	Cronbach's α
Continuous learning (CL)	In my organization, people are rewarded for learning	0.71	0.70
Inquiry and dialogue (ID)	In my organization, people spend time building trust with each other	0.76	0.75
Collaboration and team learning (CTL)	In my organization, teams/groups revise their thinking as a result of group discussions or information collected	0.72	0.72
Systems to capture learning (SCL)	My organization makes its lessons learned available to all employees	0.65	0.64
Empower people (EP)	My organization recognizes people for taking initiative	0.75	0.75
Provide strategic leadership for learning (PSL)	In my organization, leaders continually look for opportunities to learn	0.83	0.83
Connect the organization (CO)	My organization works together with the outside community to meet mutual needs	0.78	0.78
DLOQ total		0.93	0.93

Reliability estimates were calculated in the full quality-screened sample ($n = 427$ – 432 , depending on the dimension). Each dimension comprised three items.

organizational clusters were restricted to the 421 respondents assigned to one of the seven predefined organizational clusters. Respondents classified as "Unassigned/Other" ($n = 10$) or without a valid cluster assignment ($n = 5$) were excluded from the between-cluster analyses.

Each of the seven DLOQ dimensions was calculated as the mean of its three items when at least two items were available. The overall DLOQ score was calculated when at least 14 of the 21 items had been answered. Internal consistency was assessed using Cronbach's alpha and McDonald's omega. Means, standard deviations, medians, and interquartile ranges were calculated for the seven dimensions and the overall DLOQ score.

To examine integration-compatible evidence, within-group agreement was assessed using $r_{WG(J)}$ and the average deviation from the median (ADM), both for the organization as a whole and within each organizational cluster (Burke and Dunlap, 2002;

LeBreton and Senter, 2008). $r_{WG(J)}$ compares the observed within-group response variance with the variance expected under a specified null distribution; values closer to 1 indicate greater agreement. We used a uniform null distribution for the five-point response scale. ADM represents the average absolute deviation of responses from the group median.

To examine differentiation-compatible patterns, we first estimated $ICC(1)$ and $ICC(2)$ to assess cluster-related variance and the reliability of cluster means. We then conducted a linear mixed-effects profile analysis with DLOQ dimension as a within-person factor, organizational cluster as a between-person factor, and a random intercept for respondents. The dimension-by-cluster interaction was used to examine whether the profiles of the seven DLOQ dimensions differed across clusters.

Dimension-specific cluster differences were subsequently examined using classical one-way ANOVAs, with η^2 reported as an effect-size estimate. Bonferroni-adjusted pairwise comparisons

were used to identify differences between organizational clusters. Given the unequal cluster sizes, Welch ANOVAs and Games–Howell comparisons were additionally conducted as robustness analyses. Variance homogeneity was examined using Brown–Forsythe tests.

These indicators were treated as possible quantitative evidence of heterogeneity but not as sufficient evidence of fragmentation in the absence of corresponding qualitative evidence. Because the Executive Management and Governance cluster comprised only nine respondents, the mixed-effects profile analysis was repeated after excluding clusters with fewer than 10 respondents.

4.3.2 Qualitative analysis

4.3.2.1 Qualitative methodological approach

The qualitative analysis built on [Braun and Clarke's \(2006\)](#) six-phase framework for thematic analysis. Two coders (one author of this paper and one trained research assistant) independently conducted inductive coding of all 19 interviews before jointly consolidating the coding structure and emerging themes through iterative discussion. [Martin's \(1992\)](#) cultural perspectives of integration, differentiation, and fragmentation were subsequently applied as an interpretive framework to theorize the emergent themes.

4.3.2.2 Researcher roles and reflexivity

The analytic process involved two coders who independently engaged with the complete interview dataset. Both inductively coded all 19 interviews using QCAmap, guided by the open research question: “How is organizational learning culture described?” The purpose of this initial phase was to remain as close as possible to participants' accounts and to generate descriptive codes grounded in the interview material rather than in predefined theoretical concepts.

Following the independent coding process, the coders compared their coding structures through iterative discussions. Areas of convergence and divergence were critically examined and used to refine and consolidate the coding framework and emerging themes. These discussions were intended to deepen interpretation and challenge alternative readings of the data instead of establishing statistical agreement or coder reliability.

To identify recurring patterns across the dataset, codes appearing in at least 10 interviews were used as a heuristic indicator of broader thematic relevance during theme development. This threshold served as an analytic decision rule to support theme development.

Only after the inductive coding and initial theme development had been completed were [Martin's \(1992\)](#) cultural perspectives of integration, differentiation, and fragmentation applied as an interpretive framework. These perspectives were used to theorize and organize the emergent themes while preserving the inductive character of the initial analysis.

Throughout the analytic process, reflexivity was supported through continuous discussion of coding decisions, alternative interpretations, and the researchers' respective analytical perspectives. This staged approach was intended to combine

openness to the empirical material during coding with theoretically informed interpretation in the final stage of the analysis.

4.3.2.3 Coding procedure and consensus-building

All interviews were coded inductively using QCAmap. Codes that were assigned frequently across interviews ($N \geq 10$) were extracted as a heuristic indicator of recurring patterns. This threshold was used for analytic orientation.

Analytic robustness was ensured through iterative comparison of codes, joint discussion of overlaps and divergences, and negotiated refinement of thematic structures. Divergent interpretations were treated as prompts for renewed engagement with the data and further clarification of meanings. To conduct an additional AI-assisted cross-check after completion of the human coding and initial theme development, the interview transcripts were subsequently imported into MAXQDA, where the “Chat with this document” function was available. The function was used to generate standardized interview-specific summaries. These outputs served as secondary material for comparison, analytic sensitization, and reflexive challenge. They were not used for primary coding, did not independently determine themes, and were not incorporated verbatim. All final analytic decisions remained with the human researchers.

4.3.2.4 Integration of themes and theory

In the final analytic phase, the consolidated themes were interpreted through the lens of the three cultural perspectives. This step was interpretive: themes were not forced into singular perspectives but examined for how they simultaneously reflected integrative, differentiating, and fragmenting dynamics. Partial overlaps and tensions were treated as substantive empirical findings rather than methodological inconsistencies. This multi-stage analytic process enabled the development of empirically grounded analytical propositions while building on Braun and Clarke's thematic analysis framework.

4.4 Results

4.4.1 Quantitative results

4.4.1.1 Overall levels

Across the full quality-screened sample, the overall DLOQ score was moderate ($M = 3.21$, $SD = 0.59$). “Connect the Organization” ($M = 3.41$, $SD = 0.77$) and “Inquiry and Dialogue” ($M = 3.36$, $SD = 0.70$) received the highest ratings. “Collaboration and Team Learning” ($M = 3.04$, $SD = 0.71$) and “Continuous Learning” ($M = 3.11$, $SD = 0.74$) received the lowest ratings. Descriptive statistics, agreement indices, and intraclass correlations are reported in [Table 4](#).

4.4.1.2 Integration-compatible patterns

Agreement indices were compatible with a shared organization-wide component in employees' perceptions of learning culture. Organization-wide $r_{WG(j)}$ values for the seven DLOQ dimensions ranged from 0.78 to 0.84 under a uniform null distribution. Average-deviation-from-the-median indices ranged from 0.67 to

TABLE 4 Organization-wide descriptive statistics, agreement indices, and intraclass correlations.

Dimension	<i>M</i>	<i>SD</i>	<i>r</i> _{WG(<i>J</i>)}	<i>ADM</i>	<i>ICC</i> (1)	<i>ICC</i> (2)
Continuous learning	3.11	0.74	0.80	0.71	0.048	0.739
Inquiry and dialogue	3.36	0.70	0.84	0.71	0.062	0.788
Collaboration and team learning	3.04	0.71	0.82	0.67	0.076	0.820
Systems to capture learning	3.16	0.71	0.80	0.72	0.051	0.751
Empower people	3.15	0.76	0.79	0.71	0.062	0.786
Connect the organization	3.41	0.77	0.80	0.72	0.027	0.608
Provide strategic leadership for learning	3.22	0.82	0.78	0.74	0.062	0.786
DLOQ total	3.21	0.59	0.97	0.71	0.078	0.825

$r_{WG(J)}$ was calculated under a uniform null distribution for the five-point response scale ($\sigma^2_E = 2.00$; LeBreton and Senter, 2008). Under the slight-skew null distribution ($\sigma^2_E = 1.34$; LeBreton and Senter, 2008), dimension-level $r_{WG(J)}$ values ranged from 0.58 to 0.72, and the DLOQ total $r_{WG(J=21)}$ was 0.94; see Results section for details. *ADM* = average deviation from the median; 0.83 was used as a descriptive reference value. *ICCs* are based on the seven organizational clusters and are interpreted descriptively because only seven clusters were available. The 21-item $r_{WG(J)}$ for the total score (DLOQ total) is partly inflated by scale length; dimension-level agreement indices are more informative.

0.74 and therefore remained below the reference value of 0.83. These findings suggest substantial commonality in employees' ratings of the organization's learning culture, although they should not be interpreted as evidence of complete consensus. Under the uniform null ($\sigma^2_E = 2.00$; LeBreton and Senter, 2008), all 48 cluster-by-dimension $r_{WG(J)}$ values exceeded 0.70. Under the slight-skew null ($\sigma^2_E = 1.34$; LeBreton and Senter, 2008), 12 of 42 subscale cells remained strong (≥ 0.70), 27 were in the moderate range (0.51–0.70), and 3 fell below 0.51. These 48 cells comprise the six primary organizational clusters (C1–C6) $\times$ eight DLOQ dimensions (seven subscales and the DLOQ total score); Cluster C7 ($n = 9$) was excluded, consistent with its exclusion from the between-cluster aggregation analyses. Of the 48 cells, 42 are subscale cells ($J = 3$ items each) and 6 are Total-scale cells ($J = 21$ items); under the slight-skew null ($\sigma^2_E = 1.34$), all 30 cells below 0.70 were subscale cells, while all 6 Total-scale cells remained strong ($r_{WG} \geq 0.90$).

The organization-wide agreement was also compatible with variation between organizational clusters. Agreement within the organization as a whole does not require all clusters to report identical levels or profiles of learning culture. Rather, the findings suggest that employees may share a broadly similar frame of reference while evaluating specific learning conditions differently across organizational units.

4.4.1.3 Differentiation-compatible patterns

The intraclass correlations indicated modest cluster-related variation. *ICC*(1) values ranged from 0.027 to 0.076 across the seven dimensions and reached 0.078 for the overall DLOQ score. Thus, approximately 3%–8% of the variance in learning-culture perceptions was associated with organizational-cluster membership. These proportions are modest, indicating that most variation remained within rather than between organizational clusters. They may nevertheless reflect some cluster-related patterning, which was examined further using the mixed-effects profile analysis and dimension-specific comparisons.

ICC(2) values ranged from 0.61 to 0.82 across dimensions and reached 0.83 for the overall DLOQ score. These values suggest that several cluster means could be estimated with reasonable reliability, although their interpretation is limited by the small number of

TABLE 5 Linear mixed-effects profile analyses.

Analysis	Effect	<i>df</i> ₁	<i>df</i> ₂	<i>F</i>	<i>p</i>
Primary model: clusters 1–7	Dimension	6	2,465	15.71	<0.001
Primary model: clusters 1–7	Cluster	6	413	5.70	<0.001
Primary model: clusters 1–7	Dimension $\times$ cluster	36	2,465	1.92	<0.001
Sensitivity: clusters with $n \geq 10$	Dimension	6	2,417	23.36	<0.001
Sensitivity: clusters with $n \geq 10$	Cluster	5	405	6.34	<0.001
Sensitivity: clusters with $n \geq 10$	Dimension $\times$ cluster	30	2,417	2.16	<0.001

The models included DLOQ dimension as a within-person factor, organizational cluster as a between-person factor, and a random intercept for respondents. The sensitivity analysis excluded cluster C7 because of a small sample size ($n = 9$).

organizational clusters, unequal cluster sizes, and the particularly small Executive Management and Governance cluster. The *ICCs* were therefore interpreted descriptively and together with the agreement indices and cluster comparisons.

The linear mixed-effects profile analysis showed significant effects of DLOQ dimension, $F_{(6, 2,465)} = 15.71$, $p < 0.001$, and organizational cluster, $F_{(6,413)} = 5.70$, $p < 0.001$. The significant dimension-by-cluster interaction, $F_{(36, 2,465)} = 1.92$, $p < 0.001$, was consistent with differences not only in the overall level of learning-culture perceptions but also in the profiles of the seven DLOQ dimensions across clusters. The interaction remained significant when the cluster with fewer than 10 respondents was excluded, $F_{(30, 2,417)} = 2.16$, $p < 0.001$. The profile pattern therefore did not appear to be solely attributable to the small Executive Management and Governance cluster. The results of the primary and sensitivity profile analyses are reported in Table 5.

Dimension-specific analyses showed significant between-cluster differences for all seven DLOQ dimensions. The classical one-way ANOVAs yielded η^2 values ranging from 0.036 to 0.075, with the largest cluster-related effect observed for Collaboration and Team Learning. Brown–Forsythe tests did not indicate significant variance heterogeneity for any dimension or for the overall DLOQ score (all $p \geq 0.107$). Welch ANOVAs produced the same overall conclusions as the classical analyses, indicating that the findings were not dependent on the assumption of equal variances.

A corresponding between-cluster difference was found for the overall DLOQ score, $F_{(6,411)} = 5.71$, $p < 0.001$, $\eta^2 = 0.077$. Talent Development and Early Careers showed the highest overall DLOQ score ($M = 3.66$, $SD = 0.60$), whereas Corporate Services and Support Functions showed the lowest score ($M = 2.97$, $SD = 0.62$). Bonferroni-adjusted comparisons indicated that Talent Development and Early Careers scored significantly higher than Retail Banking and Customer Service, Corporate and Private Banking, Operations, Risk and Compliance, and Corporate Services and Support Functions. A Welch ANOVA was also significant, $F_{(6,73.12)} = 5.30$, $p < 0.001$, and Games–Howell comparisons identified the same four significant group differences.

Bonferroni-adjusted comparisons showed that Talent Development and Early Careers scored significantly higher than Corporate Services and Support Functions on all seven DLOQ dimensions. Further pairwise differences were more selective and varied across dimensions. It should be noted that while the cluster effect for the dimension “Connect the Organization” reached significance at the 5% level ($p = 0.019$), it would not remain significant after a Bonferroni correction for seven simultaneous comparisons ($\alpha_{\text{adjusted}} = 0.007$). This result should therefore be interpreted with caution. Taken together, the findings are compatible with local differentiation within a broader organization-wide pattern, but the modest ICC(1) values and substantial within-cluster variation caution against treating the clusters as sharply separated and internally homogeneous subcultures. Cluster means, omnibus tests, and Bonferroni-adjusted comparisons for all dimensions and the total score are reported in Table 6.

4.4.1.4 Fragmentation-compatible patterns

Quantitative support for fragmentation was limited. Brown–Forsythe tests did not indicate significant differences in within-cluster variance for any of the seven dimensions or for the overall DLOQ score (all $p \geq 0.107$). Thus, the analyses provided no evidence that some organizational clusters were systematically more internally dispersed than others.

Most within-cluster $r_{WG(J)}$ values also exceeded 0.70. The clearest localized exception concerned “Connect the Organization” in the small Executive Management and Governance cluster, for which agreement was comparatively low ($r_{WG(J)} = 0.54$, $ADM = 0.88$). Somewhat lower agreement was also observed for selected dimensions in Corporate Services and Support Functions. Given the small number of respondents in the executive cluster and the absence of systematic differences in variance, these findings were treated as descriptive indications of localized heterogeneity rather than as sufficient evidence of cultural fragmentation.

Statistical dispersion alone cannot establish fragmentation in Martin’s sense, because fragmentation concerns ambiguity, inconsistent interpretations, and shifting or situation-dependent patterns of consensus. Evidence for fragmentation was therefore evaluated primarily through the qualitative interview data.

Taken together, the quantitative findings are compatible with substantial organization-wide agreement alongside modest but systematic differentiation between organizational clusters. They provide comparatively little independent evidence of fragmentation.

4.4.2 Qualitative results

The thematic analysis yielded a central overarching theme—*learning as self-directed responsibility*—and three recurring subthemes that describe how this understanding of learning is enacted under different organizational conditions: (1) normative expectations and shared sensemaking around learning as an obligation, (2) subgroup-specific enabling and constraining conditions shaped by leadership roles and resource allocation, and (3) individualized coping practices under time pressure, information overload, and ambiguity. Table 7 provides an overview of how the overarching theme and its subthemes reflected integration-, differentiation-, and fragmentation-compatible cultural patterns.

The analysis proceeded inductively from the interview material. The perspectives are subsequently used as an interpretive lens to organize and theorize the emergent themes. Importantly, partial misalignments between themes and perspectives are treated as empirical findings rather than analytical shortcomings.

Across roles and hierarchical levels, learning is consistently framed as an individual’s responsibility. However, how this responsibility is supported, constrained, or problematized varies systematically by organizational position (e.g., board members vs. operational staff), departmental context, and situational pressures.

4.4.2.1 Integration-compatible patterns: a shared norm of self-directed learning

Analyzing the interviews from an integration perspective reveals a broadly shared understanding of learning as a core organizational value and a defining element of membership. Across interviews with board members, middle managers, and operational employees, learning is described as an expected and continuous activity that signals professional adequacy and organizational belonging. This shared orientation is supported by formal organizational structures and processes such as digital learning platforms, mandatory trainings, and regular development dialogues. Operational employees often describe these structures as providing orientation by clarifying what knowledge is considered relevant and legitimate within the organization. As one client advisor explained:

“Digital training is helpful because they show me what is expected and what I need to know” (Int. 3, client advisor).

TABLE 6 Cluster means, one-way ANOVA results, and Bonferroni-adjusted pairwise comparisons.

Organizational cluster	CL	ID	CTL	SCL	EP	CO	PSL	DLOQ total
C1 retail banking and customer service	3.18 (0.79)	3.40 (0.70)	2.93 (0.72)	3.22 (0.72)	3.20 (0.70)	3.45 (0.74)	3.30 (0.82)	3.24 (0.59)
C2 corporate and private banking	3.07 (0.69)	3.32 (0.67)	2.93 (0.63)	3.17 (0.68)	3.06 (0.75)	3.36 (0.78)	3.27 (0.86)	3.17 (0.57)
C3 specialized sales and partnerships	3.17 (0.58)	3.45 (0.59)	3.45 (0.66)	3.03 (0.64)	3.29 (0.77)	3.68 (0.79)	3.49 (0.67)	3.37 (0.49)
C4 talent development and early careers	3.57 (0.60)	3.92 (0.77)	3.44 (0.82)	3.60 (0.87)	3.68 (0.81)	3.80 (0.77)	3.64 (0.71)	3.66 (0.60)
C5 operations, risk and compliance	3.02 (0.75)	3.30 (0.67)	3.15 (0.67)	3.02 (0.67)	3.05 (0.73)	3.35 (0.63)	3.13 (0.70)	3.15 (0.53)
C6 corporate services and support functions	2.85 (0.71)	3.14 (0.73)	2.87 (0.70)	2.94 (0.67)	2.92 (0.79)	3.23 (0.87)	2.81 (0.90)	2.97 (0.62)
C7 executive management and governance	3.22 (0.62)	3.67 (0.62)	3.48 (0.56)	3.50 (0.58)	3.59 (0.86)	3.63 (0.84)	3.33 (0.60)	3.49 (0.44)
One-way ANOVA	$F_{(6,413)} = 3.84, p < 0.001; \eta^2 = 0.053$	$F_{(6,413)} = 4.71, p < 0.001; \eta^2 = 0.064$	$F_{(6,411)} = 5.55, p < 0.001; \eta^2 = 0.075$	$F_{(6,411)} = 4.01, p < 0.001; \eta^2 = 0.055$	$F_{(6,410)} = 4.68, p < 0.001; \eta^2 = 0.064$	$F_{(6,408)} = 2.55, p = 0.019; \eta^2 = 0.036$	$F_{(6,412)} = 4.67, p < 0.001; \eta^2 = 0.064$	$F_{(6,411)} = 5.71, p < 0.001; \eta^2 = 0.077$
Significant Bonferroni-adjusted comparisons	C4 > C2*; C4 > C5**; C4 > C6***	C4 > C1**; C4 > C2**; C4 > C5***; C4 > C6***	C3 > C1*; C3 > C1**; C2*; C2**; C3 > C6*; C4 > C6**	C4 > C5**; C4 > C6***	C4 > C1*; C4 > C2**; C4 > C5**; C4 > C6***	C4 > C6*	C1 > C6**; C2 > C6*; C3 > C6*; C4 > C6***	C4 > C1**; C4 > C2**; C4 > C5***; C4 > C6***

Values are means with standard deviations in parentheses. Pairwise comparisons are Bonferroni-adjusted. Because cluster sizes differed substantially, Welch ANOVAs and Games–Howell *post hoc* tests were additionally conducted as robustness analyses. For the DLOQ total score, Games–Howell tests identified the same four significant cluster differences as the Bonferroni-adjusted comparisons. CL, continuous learning; ID, inquiry and dialogue; CTL, collaboration and team learning; SCL, systems to capture learning; EP, empower people; CO, connect the organization; PSL, provide strategic leadership for learning. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. Analyses use direct cluster assignments; n varies from 415 to 420 because of item-level missingness.

From an integration perspective, this statement exemplifies how formal systems translate abstract learning norms into concrete expectations that are perceived as organization-wide and binding.

The normative character of learning is articulated most explicitly by individuals in senior leadership roles. Board members frequently employ the German term “Holschuld” to describe learning and information acquisition, emphasizing personal obligation over institutional provision. This rhetoric positions learning responsibility as a moralized norm rather than a negotiable practice. One board member stated:

“Information is something you have to seek out yourself. Employees can’t expect to be told everything; each person is responsible for obtaining the information they need” (Int. 11, board member).

The authority of the speaker and their strategic position within the organization reinforce the integrative force of this statement: it frames self-directed learning as a universally valid expectation, anchored in leadership discourse and presented as uncontested

common sense. Similarly, employees across hierarchical levels echoed this expectation by describing learning as unavoidable in light of ongoing change:

“Anyone who believes they can get by with what they know now and don’t need to learn anymore will soon realize how wrong they are” (Int. 6, operational employee).

Taken together, these statements illustrate a coherent, organization-wide narrative in which learning is constructed as a shared obligation and a prerequisite for continued participation.

4.4.2.2 Differentiation-compatible patterns: subgroup-specific learning conditions

Assuming a differentiation perspective, the analysis foregrounds variations in how the shared principle of self-responsibility is enacted across departments, leadership contexts, and occupational roles. While the normative expectation to learn is widely shared, interviewees consistently report that

TABLE 7 Mapping of qualitative themes onto the three cultural perspectives.

Subtheme/ analytic focus	Integrative dynamics (consensus and clarity)	Differentiating dynamics (subcultural variation)	Fragmenting dynamics (ambiguity and situationality)
Normative expectation to learn			
Explanation	Learning framed as a shared obligation and core organizational value; reinforced by leadership rhetoric (e.g., Holschuld) and formal structures	Enactment of the learning obligation varies by department, leadership style, and resource availability	Responsibility for learning shifts to the individual and situational under time pressure
Quote	“Information is something you have to seek out yourself [...] each employee is responsible for obtaining the information they need” (Int. 11)	“My gut feeling is that we don’t have a uniform learning culture — it’s actually very different across areas” (Int. 15)	“It [learning] often falls short [...] It happens either in the evening or quickly on the side” (Int. 8)
Role of leadership			
Explanation	Leadership recognizes and actively supports learning as value-adding for employees and the organization	Unequal support by leaders creates unequal access to training, budgets, and time across departments and roles	Varying and shifting leader support forces employees to develop <i>ad-hoc</i> coping strategies
Quote	“Basically, I always felt that we were very well supported in all further training activities” (Int. 12)	“It also requires a good manager who recognizes the corresponding added value for the employee and for their own department.” (Int. 12)	“There is always a budget for further training [...] then we were told the budget was used up [...] and we were competing with each other” (Int. 17)
Learning opportunities			
Explanation	Some learning opportunities, such as company specific learning and information platforms are available for everyone; formal learning infrastructure provides orientation and legitimacy	Availability of some learning opportunities, such as access to training depends on career stage, department affiliation and position	Confusion about expectations and policies leads to shifting learning behaviors
Quote	“If you want it, you get the training fully financed. You even get time off for it” (Int. 7)	“Our trainees — I just told them again last week — receive an incredibly good education that we give them for their life journey; it’s truly excellent.” (Int. 18)	“...did the degree, paid for it myself, in my free time [...] to show, I’m interested.” (Int. 16)
Information access and transparency			
Explanation	Central platforms signal importance of learning and information sharing	Perceived usability and relevance differ between units	Information overload and lack of transparency generate confusion
Quote	“Digital training is helpful because they show me what is expected and what I need to know” (Int. 3)	“And that’s basically the two worlds I operate in: on the one hand, I’m still Head of Private Clients, where processes are highly standardized and much of it is automated; and on the other hand, there’s the commercial property sector, where we’re talking about hundreds of millions, where everything is bespoke, where every deal is tailor-made, and where everything is discussed on a case-by-case basis...” (Int. 13)	“I’ve gotten into the habit of taking a screenshot of any information [...] and emailing it to myself so I can find it again later” (Int. 16)

actual opportunities, resources, and support differ substantially depending on local conditions. Operational employees repeatedly emphasized departmental differences when reflecting on their learning experiences:

“My gut feeling is that we don’t have a uniform learning culture—it’s actually very different across areas” (Int. 15, operational employee)

and

“It really depends on the department...” (Int. 14, operational employee).

These statements signal that consensus at the level of values coexists with subcultural variation in everyday practice, which is a core assumption of the differentiation perspective. Leadership

practices emerged as a key differentiating factor. In some clusters, managers actively foster learning by encouraging open dialogue and creating protected spaces for reflection. A customer service consultant described:

“For us, it’s important that employees open up and talk about topics that really matter to them” (Int. 5, customer service consultant).

Here, learning is embedded in relational leadership practices and supported through psychological safety, illustrating a locally enabling learning subculture.

In contrast, other interviewees—particularly from operational roles—reported structural constraints such as limited budgets and competition for training opportunities:

“There’s always a budget for training [...] and at some point they said, the budget is exhausted [...] we were even competing with each other for training spots” (Int. 17, operational employee).

This account highlights how formal resource allocation decisions at the departmental level can undermine the enactment of the shared learning norm, producing frustration, and perceived inequality.

4.4.2.3 Fragmentation-compatible patterns: ambiguity, overload, and situational coping

From a fragmentation perspective, learning-related meanings appear to be fluid, situational, and only loosely coordinated. This is particularly evident in interviewees’ descriptions of individualized learning practices that emerge in response to time pressure, information overload, and limited transparency. Several operational employees described highly personalized strategies for managing learning alongside daily work demands:

“My learning consists of constantly developing myself, both professionally and privately” (Int. 18, sales trainer)

and

“I did a degree program on my own time and paid for it myself — just to show that I’m motivated” (Int. 16, operational employee).

These statements illustrate how learning responsibility is internalized and detached from organizational structures, becoming a private investment rather than a collectively supported practice. Time scarcity was repeatedly cited as a central constraint, particularly by employees with caregiving responsibilities:

“I have two small children at home [...] there’s not much time for reading [...] I listen to podcasts instead” (Int. 12, client advisor).

Others described how learning is displaced to evenings or fragmented into brief intervals:

“You rarely allow yourself to read an article in peace. It happens in the evening or squeezed between tasks” (Int. 8, operational employee).

Information overload further contributes to fragmentation. One employee described developing *ad-hoc* coping routines:

“I’ve gotten into the habit of taking a screenshot of any information I find useful and emailing it to myself” (Int. 16, operational employee).

While such practices enable short-term coping, they also reflect a lack of shared structures for prioritizing and integrating learning, reinforcing the perception of learning as an opportunistic and individualized activity. Limited transparency regarding decision-making processes exacerbates this fragmentation:

“I don’t know how far things reach upward [...] everything happens a bit behind closed doors” (Int. 19, operational employee).

4.4.3 Integrated interpretation across quantitative and qualitative findings

Across the two strands, the findings converged on the presence of an organization-wide learning-related frame while also revealing differentiated and ambiguous enactments of that frame. The organization-wide agreement indices were consistent with the recurring qualitative expectation that employees should take responsibility for their own learning. Differentiation-compatible patterns were reflected quantitatively in cluster-related differences in DLOQ levels and profiles and qualitatively in contrasting accounts of leadership support, available resources, and career-stage-specific learning conditions. The Talent Development and Early Careers cluster provided the clearest point of convergence, combining comparatively high survey ratings with interview accounts of a structured and strongly supported learning environment. By contrast, the quantitative analyses provided little independent evidence of fragmentation, whereas the interviews revealed ambiguity, conflicting expectations, information overload, and situational coping practices. This divergence illustrates the complementary value of the two methods: quantitative analyses identified patterns of agreement and structured group differences,

while qualitative accounts made unstable and contradictory meanings visible.

5 Discussion

The aim of this study was to advance the theoretical and empirical understanding of organizational learning culture (OLC) by applying Martin's (1992) three-perspective approach—integration, differentiation, and fragmentation—to the study of learning culture within organizations. Our systematic scoping review revealed that existing research has overwhelmingly conceptualized OLC from an integration-compatible perspective: 208 of the 210 publications treated OLC primarily as an organization-wide and internally coherent construct, whereas only two publications were classified as differentiation-compatible and none as primarily fragmentation-compatible. Applying Martin's framework to learning culture thus extends prior research's conceptualization of OLC as a homogeneous, organization-wide construct, and thereby contributes to a more dynamic and multi-layered understanding of how learning-related meanings are shared, contested, and negotiated in organizational life. By integrating quantitative and qualitative data, the case study indicates that OLC can indeed comprise both coherence and variation: shared assumptions about learning coexist with subcultural differences and ambiguous or situational interpretations. This finding is consistent with Harris and Ogbonna's (1998, p. 107) observation that “diverse and rich findings, conclusions and understanding can be reached by analyzing one company from each of the three perspectives.” Our findings show that organizational learning culture is not monolithic but characterized by simultaneous patterns of consensus, differentiation, and ambiguity that shape how learning is interpreted and enacted across organizational contexts.

Applying the three perspectives to the interview material further demonstrated how the approach can reveal context-related patterns—in this case, differences associated with career stage—that might remain overlooked when OLC is examined exclusively from an integration perspective.

5.1 Theoretical implications

The study makes three main theoretical contributions to the literature on OLC.

First, by transferring Martin's (1992) three-perspective approach from general organizational culture to the specific domain of learning culture, we expand the theoretical lens through which OLC can be understood. The integration perspective on organizational culture emphasizes shared values, consensus, and coherence within organizations (Schein, 2010). While this view offers valuable insights into how collective norms and beliefs shape learning environments, it tends to obscure intra-organizational variation, the existence of culturally distinct subunits, and the role of ambiguity. As Martin (1992) argued, a purely integrative analysis may therefore create an overly coherent account of organizational culture and fail to detect significant disparities.

Second, the study contributes conceptual clarity by proposing a definition of OLC derived from the literature review and the conceptual transfer of Martin's (1992) three-perspective approach. This new definition emphasizes that OLC is not necessarily a uniform organizational attribute but an evolving cultural phenomenon. It recognizes that organizational learning culture consists of widely shared as well as differentiated and fragmented assumptions, values, norms and artifacts, thereby moving beyond the assumption of cultural unity that has characterized much of the OLC literature. During the systematic scoping review of 210 publications, it became apparent that the construct of organizational learning culture is conceptually underdeveloped and inconsistently defined. This lack of definitional clarity hampers cumulative theory building (e.g., Suddaby, 2010) and complicates the comparison of empirical findings. Our proposed definition therefore aims to offer a theoretically grounded and comprehensive conceptual framework that explicitly acknowledges multiple cultural perspectives and can serve as a basis for further conceptual refinement and empirical validation.

Third, the study provides an empirical and methodological contribution by showing how the three perspectives can be identified through different analytical lenses, thereby enabling a more comprehensive understanding of OLC. To our knowledge, the three perspectives have not yet been used in the analysis of quantitative data. Rather than treating overall means, subgroup differences, and individual dispersion as interchangeable indicators, we used different methods of analysis for each perspective and thus linked each cultural perspective to distinct forms of evidence. Integration was examined through organization-wide agreement indices and recurring qualitative expectations; differentiation through ICCs, cluster-level and profile differences, and contrasting subgroup accounts; and fragmentation through dispersion diagnostics interpreted in conjunction with qualitative evidence of ambiguous, contradictory, and situation-dependent meanings. The findings show that quantitative analyses can identify sharedness and structured subgroup variation but that fragmentation cannot be inferred from dispersion alone. Combining quantitative and qualitative evidence therefore provides a more theoretically aligned and comprehensive basis for investigating OLC.

5.2 Practical implications

From a practical standpoint, adopting a three-perspective view provides a richer understanding of learning cultures in organizations. For managers and HRD professionals, this framework serves as a diagnostic tool to uncover the multiple realities of learning within their organization—recognizing that what appears as a supportive organizational learning culture from an executive viewpoint may be experienced quite differently at the employee level.

The integration perspective highlights the unifying potential of shared learning norms and values. In the present case, the organization's emphasis on self-directed responsibility provides clear expectations and coherence. Yet, the case study also showed that these shared norms can lead to different effects, depending on the individuals' interpretations. In the present

case, for example, the normative clarity also led to perceived overload and pressure in those employees who perceived their individual resources as insufficient. Thus, only focusing on consensus may also have disadvantages. Interventions aiming to strengthen organizational learning culture should therefore balance shared learning expectations with attention to employees' different resources, interpretations, and opportunities to enact these expectations.

The differentiation perspective underscores that organizational learning culture varies across subgroups. Our findings revealed a particularly supportive learning subculture in the apprenticeship program (cluster C4), where clear structures, leadership engagement, and resource allocation supported motivation and participation. At the total-scale level, within-cluster agreement for C4 was strong ($r_{WG} = 0.965$ under the uniform null; $r_{WG} = 0.919$ under the slight-skew null), consistent with an overall coherent learning orientation. Per-dimension agreement under the slight-skew null was more variable (r_{WG} range: 0.50–0.72), indicating that coherence is most robust at the level of the overall learning culture. In contrast, other departments reported limited opportunities and a lack of leadership involvement. Recognizing and learning from such subcultural differences allows organizations to transfer effective practices across units while respecting their specific context with its requirements and conditions, e.g., regarding work schedules, budget restrictions, and available infrastructure. Organizational interventions can thereby be developed in a more targeted and therefore impactful way, while at the same time reducing costs.

The fragmentation perspective offers a further layer of insight: it shows that not all variation is organized or stable. In our case study, employees often navigate ambiguity, information overload, and conflicting signals regarding learning expectations. These ambiguous spaces can be frustrating and may constrain learning, although under some conditions they may also create room for individual initiative and experimentation. For practitioners, acknowledging this ambiguity rather than suppressing it, can offer nuanced information. It can, for example, reveal specific needs of individuals, point to targeted structural or individual interventions, such as clarifying responsibilities, providing protected learning time, improving access to information, or offering coaching where appropriate. The fragmentation as well as the differentiation perspective furthermore allow for the anticipation of “pockets of resistance, ignorance, and confusion” (Martin, 1992, p. 186), offering managers as well as HR valuable insights for fostering an organization's learning culture.

By examining OLC successively through the integration, differentiation and fragmentation perspectives and keeping their analytical implications distinct, the three-perspective view allows for a more comprehensive understanding of an organization's learning culture. This is particularly important when the aim is to realize learning opportunities throughout the organization. It also helps practitioners to move beyond dominant (managerial) narratives and include the experiences of less visible and less powerful groups—such as lower-qualified employees, newcomers, or part-time staff (Decius et al., 2021; Baethge-Kinsky, 2020; Gräfe et al., 2024; Mitschelen and Kauffeld, 2025). These perspectives must be taken into account if the purpose is to realize the full potential of learning throughout the organization. Raising leaders' awareness for the complexity of cultural phenomena in

the organization, for example in leadership development programs may be one lever: Integrating these three perspectives into training for leaders and sensitizing them may help to acknowledge the full phenomenon of organizational learning culture.

Lastly, while our case study primarily served to empirically illustrate the three-perspective approach, the implications are relevant for other industries as well, as the banking context illustrates two typical challenges. First, learning-related meanings may differ systematically across highly regulated functions (e.g., risk/compliance) vs. customer-facing or digital units, making a differentiation-informed diagnosis particularly relevant. Second, regulatory pressure can create perceived tensions between learning/innovation and compliance demands, which may contribute to fragmentation-compatible interpretations such as information overload and conflicting signals. Making such tensions explicit and defining “safe-to-try” learning spaces within clear compliance boundaries may help reduce dysfunctional ambiguity while preserving adaptive learning.

5.3 Limitations and future research

Several limitations should be acknowledged. First, as Martin (1992) herself noted, the three-perspective approach is ultimately an analytical lens—a device for directing attention rather than an objective description of organizational reality. Its application inevitably reflects the researcher's interpretive stance, and the same body of evidence could be organized differently under other theoretical frameworks. Future research should compare the explanatory value of the three-perspective approach with complementary culture, climate, and multilevel frameworks.

Second, the systematic scoping review, while drawing on three databases and covering 210 included publications, is subject to several constraints. The search was restricted to English-language publications, which excludes a body of work in German and other languages. For instance, Foelsing and Schmitz (2021) define learning culture as the basic learning-related beliefs, values, norms, and attitudes, as well as the associated behavioral expectations, which influence perceptions, thoughts, actions, and feelings related to learning and thus reflect its significance within the organization. Similarly, Schaper et al. (2006) developed the learning culture inventory as a diagnostic tool for assessing learning culture. Furthermore, the standalone term *learning culture* was not used as an independent search term. Publications that use this label without also including organizational learning culture or a close variant may therefore be underrepresented. The full-text screening was primarily conducted by one reviewer after a calibration phase in which two reviewers reached complete agreement on 20 records; this limits the formal assessment of screening reliability across the full corpus. The coding of construct labels, definitional treatment, instruments, and perspective compatibility was grounded in structured human-generated screening notes and supplemented by LLM-assisted structuring and cross-comparison with human arbitration. This human-first, machine-assisted procedure differs from emerging multi-model screening approaches in which LLMs classify records first and humans review discordant cases (Hilkenmeier et al., 2026), however, validated benchmarks for multi-class, full-text-based

content coding of this kind are not yet available. Although all uncertain, divergent, and low-confidence classifications were verified against the original publications, classification errors cannot be ruled out. The publication-level coding and coding scheme are provided in the [Supplementary Material S3](#); the detailed decision log and page-specific verification notes were retained in the internal audit file.

Third, the perspective-compatibility coding identifies implicit assumptions embedded in how publications approach OLC rather than authors' explicitly stated theoretical commitments. Classifications of integration-compatibility were often inferred from the scope of the definition or measurement approach rather than from direct theoretical statements. A supplementary full-text examination of the 210 included publications supports this characterization: of the 121 publications in which Martin appeared as an author name, only four explicitly cited Joanne Martin's work on organizational culture, and none of these four references specifically invoked the three-perspective framework. A targeted search for the term *fragmentation* returned nine results, none of which addressed cultural fragmentation in Martin's sense. The terms *integration perspective* and *differentiation* appeared more frequently (192 and 35 results, respectively), but the majority of these occurrences referred to broader uses of those terms rather than Martin's framework. These findings confirm that the perspective-compatibility classification captures a largely tacit theoretical orientation rather than a deliberate analytical choice: publications were not required to reference Martin to be classified as integration-compatible, because the classification reflects structural features of their definitional and measurement practices. The 208 integration-compatible publications therefore include many cases in which no cultural perspective was consciously articulated, and the inference of integration-compatibility is the reviewers' interpretive act, not the authors' stated position.

Fourth, the quantitative instrument used—the Dimensions of the Learning Organization Questionnaire ([Marsick and Watkins, 2003](#))—originates in the learning-organization tradition and primarily assesses learning-supportive practices and structural conditions. Although it is useful for examining organization-wide patterns, it may be less sensitive to subgroup-specific meanings, ambiguity, and contested interpretations. Future research should therefore consider alternative ways of operationalizing learning culture as a cultural construct distinct from the learning organization, for example by assessing the degree to which learning-related assumptions, values, and norms are shared, differentiated, or ambiguous across organizational groups. In addition, analytical approaches that are better suited to identifying subcultural patterns should be explored (e.g., [Kasa, 2025](#)).

Fifth, this study focused on a single organizational case, which enabled in-depth understanding but limits generalizability. Comparative studies across industries, national contexts, or organizational maturity levels are needed to examine how the relative salience of integration, differentiation, and fragmentation varies across settings.

Lastly, a further limitation concerns Cluster 4 (Talent Development and Early Careers), which includes both apprentices on structured vocational programs and graduate trainees. While the cluster is therefore not fully homogeneous in organizational

role, age and organizational tenure are structurally confounded with cluster membership, which constrains the interpretability of findings specific to this group.

5.4 Conclusion

This study demonstrates that applying [Martin's \(1992\)](#) three-perspective approach to organizational learning culture offers valuable theoretical and practical insights. It challenges the prevailing assumption of cultural unity and highlights that OLC is best understood as a dynamic system of shared and contested meanings that shape how learning is understood, enacted, and supported within organizations. By empirically identifying integration-, differentiation-, and fragmentation-compatible patterns within a case study, the study shows that coherence and ambiguity coexist in everyday learning perceptions and practices. Recognizing and working with this coexistence can help organizations foster learning cultures that are both inclusive and adaptable, thereby supporting continuous learning, innovation, and organizational development.

Data availability statement

The data underlying the systematic scoping review are included in the article and its Supplementary Material. The anonymized quantitative data supporting the conclusions of the empirical study are available from the corresponding author upon reasonable request. The qualitative interview data are not publicly available because they contain potentially identifiable and confidential information relating to the participants and their organizational context. Requests for access to de-identified qualitative data may be directed to the corresponding author and will be considered subject to applicable confidentiality and data protection requirements.

Ethics statement

The studies involving human participants were reviewed and approved by the Ethics Committee of IU International University of Applied Sciences (IU Internationale Hochschule), Germany (approval dated May 11, 2023). The participants provided their informed consent to participate in this study.

Author contributions

TK: Resources, Investigation, Writing – original draft, Writing – review & editing, Methodology, Formal analysis, Conceptualization, Project administration, Data curation. AS: Software, Conceptualization, Writing – original draft, Resources, Formal analysis, Writing – review & editing. RG: Writing – original draft, Formal analysis, Writing – review & editing.

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The author(s) declared that Generative AI was used in the creation of this manuscript. Generative AI (ChatGPT, GPT-5.1, OpenAI) was used to support the formulation, refinement, and language editing of text during the preparation of this manuscript. All content produced or edited with the assistance of ChatGPT was thoroughly reviewed, verified for factual accuracy, and checked for plagiarism by the author(s). The AI system did

not contribute independently to the study's conceptualization, analysis, interpretation, or conclusions and is not listed as an author. In the qualitative analysis, MAXQDA24's integrated AI Assistant was used to inductively query the interview transcripts ("chat with the documents") to explore potential themes. This use served exclusively as a comparative reference point and did not replace human coding or analytic decision-making. All themes and interpretations were developed, reviewed, and validated by the author(s).

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Supplementary material

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