

Learning barriers at the workplace: Development and validation of a measurement instrument - Frontiers

Source: gnews-learning-development | **Published:** July 15, 2022 | **PMS Relevance:** PMS RELATED | **Type:** Research Study | **Geography:** Europe

Source URL: <https://news.google.com/rss/articles/CBMijwFBVV95cUxQQjdJLUxGMjZaYTBxUnp1OTg1d0J>

Executive Summary

This study addresses a gap in the workplace learning literature: while facilitating factors to learning have been extensively studied, measurement instruments specifically targeting learning barriers remain underdeveloped. The authors argue that barriers to informal and formal learning require distinct, validated measurement tools that capture individual, team, and organizational dimensions. Drawing on a pre-study of 26 consultancy professionals via semi-structured interviews, the researchers developed a novel instrument informed by existing instruments from Belling et al. (2004) and Crouse et al. (2011). The resulting questionnaire was validated with a cross-sectional sample of 112 consultancy employees and freelancers using exploratory factor analysis, confirmatory factor analysis (CFA), internal consistency assessment, and convergent validity testing. The final instrument yielded a three-factor scale for formal learning barriers and a two-factor scale for informal learning barriers, with Cronbach's alpha values ranging between 0.80 and 0.86. The authors conclude that the validated scales can help organizations identify hindrances to workplace learning and identify areas for structural or cultural change.

Key Insights

1. Barriers to workplace learning are distinct from facilitators and are not universal — what functions as a barrier for one group of learners may serve as a facilitator for another, depending on individual and contextual factors.
2. The study distinguishes between three types of learning barriers: external barriers (e.g., authoritative restrictions, bounded agency), internal barriers (e.g., personal motivation, uncertainty), and fitting problems (e.g., alienation between learner and work tasks due to structural misalignment).
3. The validated instrument produces separate factor structures for formal learning (three factors) and informal learning (two factors), suggesting that barriers to these two learning modes are psychometrically distinct and warrant separate measurement.

Practical Takeaways

- Organizations in knowledge-intensive service sectors can use the validated five-category framework — individual, interpersonal, structural/cultural, technological, and change/uncertainty barriers — as a diagnostic lens to identify where learning is being inhibited.
- The instrument's separation of formal and informal learning barriers allows practitioners to distinguish between barriers that affect structured training programs versus those that affect day-to-day experiential and social learning.

Critical Analysis

Strengths: The study follows a rigorous multi-stage validation process including exploratory factor analysis, CFA, internal consistency (Cronbach's alpha 0.80–0.86), and convergent validity assessment. The pre-study grounds item development in qualitative data from practitioners, reducing the risk of purely theoretical item generation. The theoretical foundation draws on well-cited workplace learning literature.

Limitations: The sample is restricted to 112 consultancy employees and freelancers, which significantly constrains generalizability to other sectors or organizational types. The cross-sectional design prevents causal inference. The reliance on self-report measures introduces common method bias risk. The pre-study sample of 26 participants is small for an interview-based grounding study. The article text provided is incomplete (ending mid-sentence), which limits full assessment of the methods and discussion sections.

Potential bias: The exclusive focus on consultancy work — chosen for its complexity and variety — may inadvertently skew the instrument toward barriers relevant in high-autonomy, project-based, client-facing roles, which may not translate to manufacturing, public sector, or routine service environments.

Organizational Practice

The article describes consultancy organizations as the study context, where employees engage in both formal training programs and informal, experience-based learning as part of complex, client-facing project work. Interview data from 26 consultants identified prevalent organizational learning barriers including ineffective IT infrastructure, misleading communication, lack of supervisory support, and disruptions from colleagues or clients. The instrument development process involved employee self-report surveys administered cross-sectionally within consultancy firms and freelance arrangements.

Strategic Implications

The existence of psychometrically distinct barrier structures for formal versus informal learning suggests that organizational diagnostics treating all workplace learning as a single phenomenon may miss important distinctions. The identification of technological constraints and interpersonal barriers as measurable factors points to the relevance of infrastructure and social climate as dimensions of learning system design. The instrument's development in a consultancy context raises questions about whether similar barrier profiles emerge in lower-autonomy or more standardized work environments, which represents an open empirical question with implications for how broadly PMS-linked learning diagnostics can be applied.

Validation Status: passed