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ORGANIZATIONAL LEARNING AND ORGANIZATIONAL EFFECTIVENESS IN FAMILY AND NON-FAMILY FIRMS

Grzegorz GŁÓD^{1*}, Ewa RACZYŃSKA², Aleksandra SWAŁEK³

 ¹ University of Economics in Katowice, Faculty of Economics, Department of Entrepreneurship and Management Innovation; grzegorz.glod@ue.katowice.pl, ORCID: 0000-0001-9699-2427
 ² University of Economics in Katowice, Faculty of Economics, Department of Entrepreneurship and Management Innovation; ewa.raczynska@ue.katowice.pl, ORCID: 0000-0002-7834-1353
 ³ University of Economics in Katowice, Faculty of Economics, Department of Entrepreneurship and Management Innovation; ewa.raczynska@ue.katowice.pl, ORCID: 0000-0002-7834-1353
 ³ University of Economics in Katowice, Faculty of Economics, Department of Entrepreneurship and Management Innovation; aleksandra.swalek@uekat,pl, ORCID: 0000-0002-9977-4617
 * Correspondence author

Purpose: The aim of this article is to attempt to answer the question of how organizational learning affects organizational effectiveness and whether there exists a mediating role of organizational slack in this relationship. Additionally, an effort was made to identify differences that may occur between family-owned and non-family-owned firms in the studied research area. **Design/methodology/approach**: Survey research was conducted in a group of 363 firms (197 family businesses and 184 non-family businesses). In the analysis of the results, the first step involved assessing the reliability of the questionnaire used, and subsequently, the PLS-SEM method was employed to verify the hypotheses proposed in the study.

Findings: The conducted research has revealed the existence of a significant relationship between organizational learning and organizational effectiveness, with the presence of organizational slack playing a mediating role to some extent. Importantly, no differences were observed in this regard between family businesses and non-family businesses.

Research limitations/implications: The utilization of survey research is associated with the presence of subjectivity in assessments by respondents.

Originality/value: This article is intended for researchers specializing in family-owned businesses and scholars interested in organizational learning and organizational slack, as well as their interrelationship. For management practitioners, the positive correlation between organizational learning and effectiveness may be of particular significance.

Keywords: organizational learning; organizational effectiveness; family business; organizational slack.

Category of the paper: Research paper.

1. Introduction

The rigorous and systematic learning within organizations may contribute to their continual and rapid adaptation to an evolving and increasingly complex environment. Numerous arguments posit that the organizational learning of enterprises plays a pivotal role in establishing competitive advantage (Lien, Ha, 2019). It is also recognized as one of the key strategic sources for attaining long-term organizational outcomes and contributes to the growth and innovation of firms (Hussain et al., 2023). Furthermore, research findings underscore the significance of organizational slack in sustaining competitive advantage in firms characterized by a dynamic environment stemming from institutional transformations (Głód, Raczyńska, 2022). Additionally, a relationship has been observed between organizational slack and organizational innovation (Ćwiklicki, Wodecka-Hyjek, 2014). The combination of these two concepts, both in the international and Polish-language literature, remains marginal. Interestingly, there is a lack of studies concerning the role of organizational learning and organizational slack in comparing the performance of family and non-family firms. The presence of a family contributes to the alignment of the owners' goals with those of the firm, as well as an emphasis on long-term objectives. Family members engaged in running the business accumulate experiences over generations and share their acquired knowledge with younger generations, and their high involvement in the firm can lead to increased motivation for learning (Zahra, 2012). It is worth noting that family and non-family firms differ in several areas (Ingram et al., 2022). A review of the existing knowledge regarding organizational learning, organizational slack, and organizational outcomes has revealed a research gap in this domain. Therefore, the research results presented in this article may constitute a significant contribution to theory development.

2. Organizational learning

The inherent characteristic of organizations should encompass the capacity for learning, information acquisition, and development. Especially in the contemporary era of Industry 4.0, which is grounded in information technology, artificial intelligence, and the Internet of Things, the issue of organizational learning appears to be of paramount importance (Lenart-Gansiniec, 2019). Research pertaining to organizational learning initially stemmed from researchers' interest in human learning processes within enterprises (learning in organization) and subsequently shifted focus toward organizational learning processes (learning by organization) and learning organizations (Jaskanis, 2016). A closely related concept to learning is knowledge management (Olejniczak et al., 2012). These terms are interdependent and are frequently

intertwined in both definitional and practical contexts, mutually reinforcing each other in organizational research (Farooq, 2019).

Organizational learning comprises a set of activities such as knowledge acquisition, information distribution, its interpretation, and encoding within an organization, both intentionally and unintentionally influencing organizational well-being. It constitutes a collective ability rooted in experience and cognitive processes, encompassing knowledge acquisition, sharing, and utilization (Noruzy et al., 2013). Organizational learning occurs at four levels: the individual employee, the team, the organization as a whole, and the external environment (Wiśniewska, Wiśniewski, 2020).

The relationship between organizational learning and business outcomes is embedded within the very definitions of organizational learning (Lien, Ha, 2019). Mai et al. highlight that organizational learning is regarded as a fundamental source of information for organizations to achieve superior performance and maintain competitive advantage. The research findings cited by the authors confirm a positive correlation between organizational learning and firm performance, as well as innovation. The acquisition of knowledge contributes to improved organizational efficiency, as it enables companies to discover new solutions and develop products that meet market demand. Knowledge distribution can lead to a culture of knowledge sharing, ultimately enhancing organizational profitability (Mai et al., 2023). Meanwhile, Gonzalez-Padron et al. have validated the impact of knowledge interpretation on innovation, learning efficiency, customer performance, and internal processes (Gonzalez-Padron et al., 2010). Studies conducted by Bontis et al. have demonstrated a positive relationship between learning at individual, group, and organizational levels and firm performance (Bontis et al., 2002). It is argued that knowledge is a valuable asset, and organizational learning is essential for the discovery of new knowledge and the construction of competitive advantages. Furthermore, organizational learning, by increasing environmental sensitivity, contributes to enhanced organizational efficiency (Hadi, 2023).

Zahra draws attention to family-owned businesses, which, unlike non-family firms, often prioritize longevity, exhibit conservatism, and may isolate themselves from stakeholders, potentially impeding the acquisition of new knowledge. However, the results of Zahra's research indicate that family ownership positively impacts the scope and pace of learning. The presence of family within the firm becomes a motivating factor for engagement in organizational learning (Zahra, 2012). The existing literature serves as a starting point for further exploration of the relationship between organizational learning and firm performance.

3. Organizational slack

The precursors to the concept of organizational slack, particularly as it pertains to organizational learning, were elucidated by R. Cyert and J. March in their seminal work in 1963, which initially identified the foundational connections between these two concepts. Organizational slack is a pivotal component of organizational learning, as it is defined as a reservoir of resources that exceed the minimum necessary for conducting operations (Vanacker et al., 2019). The resource-based perspective emphasizes that slack can emerge intentionally or unintentionally (Błach, Gorczyńska, 2017) and can be utilized according to the needs or strategies of the organization. Leveraging organizational slack for the purposes of organizational learning can yield numerous advantages for the enterprise, with literature indicating associations between organizational slack and organizational renewal, effectiveness, productivity, efficiency, and innovation (Głód, Raczyńska, 2022). The link between organizational slack and innovation, as well as the processes occurring within the organization, cannot disregard the concept of learning (Suzuki, 2013). It is also worth noting the positive impact of organizational slack on organizational creativity and learning (Bratnicka-Myśliwiec, Ingram, 2022). However, it is fallacious to assume that a higher level of organizational slack is invariably beneficial for the organization. Organizational slack exhibits a U-shaped relationship, wherein it confers an advantage to the organization only up to a certain point (Chiu, Law, 2009). An excess of organizational slack does not positively affect an organization's capacity for learning, although it remains essential for the learning process.

Organizational learning often serves as an intermediary between slack and specific desired outcomes, such as innovation (Jin et al., 2015). A typology of resources influencing the level of organizational slack takes into account available, renewable, and potential resources (Gabryś, Bratnicki, 2015). Another categorization of slack distinguishes between absorbed and unabsorbed slack (Gabryś, 2015). Unabsorbed slack serves to facilitate learning, aid in adaptation, and enhance the benefits derived from organizational learning, whereas absorbed slack might increase the risk of bureaucracy, resistance to change, and the costs associated with organizational learning (Qian et al., 2023).

The multitude of connections between organizational learning and organizational slack presents an intriguing avenue for research, which remains inadequately explored, and can be identified as a research gap. Often, innovation serves as a common denominator between these two concepts (Wang et al., 2017). Undoubtedly, a compelling approach would involve a direct analysis considering organizational learning and the mediating role of organizational slack. This article examines the role of slack in the relationship between organizational learning and organizational effectiveness, thereby enriching our knowledge in this domain. Based on the literature review, two research hypotheses were formulated:

- H1: There is a relationship between organizational learning and organizational effectiveness.
- H2: Organizational slack mediates the relationship between organizational learning and organizational effectiveness.

Additionally, the analysis explores the identification of differences that exist between family-owned and non-family-owned firms within the studied research area.

4. Research method

The discussed empirical studies constitute one of the threads in broader research concerning the competitiveness of family and non-family businesses in Poland during the global economic crisis. These studies were conducted at the Department of Entrepreneurship and Innovative Management at the University of Economics in Katowice.

The research was carried out from July to November 2022 among 363 companies, of which 179 were family businesses and 184 were non-family businesses. Tables 1-3 present the quantitative distribution of the surveyed enterprises in terms of market, activity profile, and size.

Table 1.

| Ought atime division | ~ | farmand | | has an and at |
|-----------------------|---|------------|---------------------|---------------|
| Quantitative division | 0 | i survevea | companies | ov markei |
| \mathcal{L} | | | · · · · · · · · · · | |

| | Local market | Regional market | National market | International market | Global market |
|-------------------------|--------------|--------------------|--------------------|-------------------------|------------------|
| Family businesses | 71 | 40 | 47 | 15 | 6 |
| Non – family businesses | 36 | 44 | 75 | 24 | 5 |

Source: Own based on research results.

Table 2.

The quantitative division of surveyed firms by their business profile

| | Commercial | Service | Manufacturing | Mixed | No definition |
|-------------------------|------------|---------|---------------|-------|---------------|
| Family businesses | 29 | 82 | 26 | 35 | 7 |
| Non – family businesses | 37 | 75 | 26 | 40 | 0 |

Source: Own based on research results.

Table 3.

Quantitative division of surveyed firms by company size

| | Micro | Small | Medium | Large | No definition |
|-------------------------|-------|-------|--------|-------|---------------|
| Family businesses | 73 | 80 | 16 | 7 | 3 |
| Non – family businesses | 50 | 77 | 41 | 16 | 0 |

Source: Own based on research results.

The measurement scales used in the empirical study were based on the subject literature and employed seven-point Likert scales (1 = strongly disagree, 7 = strongly agree). To investigate organizational learning, the operationalization proposed by Jerez-Gomez, P., Céspedes-Lorente, J., & Valle-Cabrera (2005) was utilized, consisting of 10 statements. In the analysis of organizational slack, two statements from Khan and Mir (2019) were employed. Furthermore, to assess organizational effectiveness, the operationalization proposed by Schilke, comprising 6 statements, was employed.

To verify the hypotheses formulated in this study, the PLS-SEM method (partial least squares structural equation modeling; Jöreskog, Wold, 1982; Hair et al., 2021; Hair et al., 2022) was employed. This method enables the estimation of parameters in multivariate models containing latent variables, even with a relatively small number of observations, and also in cases where constructs are identified by single indicators. The computations were conducted using the PLS-SEM package in Stata 17 (Venturini, Mehmetoglu, 2019).

5. Results of the empirical research conducted

In the first instance, an analysis of the measurement part (outer model) was conducted. The assessments of factor loadings are presented in Table 4 below.

Table 4.

The results of estimations pertaining to the magnitudes of factor loadings for the foundational model

| Indicator | Organizational learning | Organizational slack | Organizational effectiveness |
|---|----------------------------|-------------------------|---------------------------------|
| Learning of employees is considered more as an investment than a cost. | 0.694 | | |
| The management of our company looks favorably upon implementing changes in any area to adapt and/or stay ahead of environmental changes. | 0.776 | | |
| The ability to facilitate employee learning is considered a pivotal factor within our company. | 0.733 | | |
| Innovative ideas that prove effective are rewarded within our organization. | 0.794 | | |
| All employees possess a general understanding of our company's objectives. | 0.637 | | |
| All constituent elements comprising our company (organizational units, sections, work teams, and individuals) are acutely aware of their contributions toward achieving overarching goals. | 0.648 | | |
| All organizational units constituting our company are interconnected, collaborating in a coordinated manner. | 0.649 | | |
| Experiences and ideas sourced from external entities (consultants, clients, training firms, etc.) are regarded as valuable tools for our company's learning. | 0.720 | | |

| Cont. table 4. | | | |
|---|-------|-------|-------|
| It is part of our company's culture for employees to express their opinions and suggestions concerning established procedures and task execution methods. | 0.747 | | |
| Employees have the opportunity to engage in discussions about new ideas, programs, and actions that could benefit our company. | 0.691 | | |
| In comparison to our competitors, our organization possesses greater financial resources that can be invested in services and operations. | | 0.934 | |
| We face fewer budgetary constraints than four years ago (in 2018). | | 0.637 | |
| We have attained a strategic advantage over our competitors. | | | 0.739 |
| We hold a significant market share. | | | 0.793 |
| Overall, we achieve greater success than our primary competitors. | | | 0.835 |
| Our EBIT (earnings before interest and taxes) consistently exceeds industry averages. | | | 0.848 |
| Our ROI (return on investment) consistently surpasses industry norms. | | | 0.834 |
| Our ROS (return on sales) consistently exceeds the industry average | | | 0.842 |
| Source: Own based on research results | | | |

Cont. table 4.

Source: Own based on research results.

The factor loadings for the utilized three constructs in most cases exceed the critical threshold of 0.708 (Hair et al., 2021, p. 77). Simultaneously, the results presented below do not indicate the necessity of eliminating items for which the factor loading values are slightly lower. Subsequently, an assessment of the basic model's quality was conducted (Table 5), utilizing the Cronbach's alpha coefficient for reliability evaluation, as well as alternative reliability indicators: Joreskoga (1971) (ρ_c) and Dijkstra (2014) (ρ_a). Cronbach's measure is considered a conservative estimate of construct reliability, while Joreskoga's version typically yields noticeably higher values. Dijkstra's measure is often regarded as a reasonable compromise (see Hair et al., 2021, p. 78).

Table 5.

The measures for evaluating the quality of the measurement component of the model

| Measure | Organizational learning | Organizational slack | Organizational effectiveness |
|------------|-------------------------|----------------------|---------------------------------|
| | Relia | ability | |
| Cronbach | 0.899 | 0.484 | 0.899 |
| ρ_{c} | 0.910 | 0.773 | 0.923 |
| ρ_A | 0.935 | 0.673 | 0.903 |
| | Conve | ergence | |
| AVE | 0.505 | 0.639 | 0.666 |
| | Disti | nctness | |
| | | Organizational slack | Organizational effectiveness |
| | Organizational learning | 0,178 | 0,328 |
| HTMT | Organizational slack | | 0,542 |

Source: Own based on research results.

Regarding the assessment of convergent validity of the basic model, the Average Variance Extracted (AVE) coefficient was employed, while for assessing discriminant validity, the criteria of HTMT (Heterotrait-monotrait ratio) were applied.

The assessment of the quality of the basic model yielded positive results due to the following reasons:

- 1. The values of the ρ_a coefficient for organizational learning and effectiveness exceed 0.9, indicating a high reliability of the measurement of both constructs. In the case of slack, the value is noticeably lower but still above the critical threshold of 0.6, which is acceptable for exploratory analyses.
- 2. The AVE coefficients assume values above 0.5 in all cases.
- 3. The HTMT coefficient should be below 0.9, which is met and indicates a clear differentiation of constructs.

Based on the above results, it can be concluded that the proposed model exhibits satisfactory reliability, convergent validity, and discriminant validity. Consequently, we can proceed to the analysis of the structural (internal) part of the discussed model, as characterized in Table 6.

Table 6.

| The results of the | estimation of the structural | l component of the model |
|--------------------|------------------------------|--------------------------|
| 5 | 5 | 1 5 |

| Independent veriable | Dependent variable | | |
|-------------------------|----------------------|------------------------------|--|
| Independent variable | Organizational slack | Organizational effectiveness | |
| Organizational learning | 0,150*** | 0,257*** | |
| Organizational slack | | 0,505*** | |
| R ² | 0,020 | 0,356 | |

Note. The statistically significant results were denoted by asterisks. (*** p < 0.01).

Source: Own based on research results.

The analysis of the above results indicates a weak but statistically significant relationship between organizational learning and slack. Conversely, a strong relationship exists between organizational learning and organizational effectiveness, as well as between slack and organizational effectiveness. From the perspective of the article's theme, the most crucial aspect is confirming the significant relationship between organizational learning and organizational effectiveness (Hypothesis 1).

Additionally, a comparison of the analyzed relationships was conducted for family and nonfamily firms. Estimates of the structural part of the model, broken down by family and nonfamily firms, are presented in Table 7. However, the differences in the estimates were not significant enough to be statistically meaningful.

Table 7.

Estimations of the structural components of the model broken down by family and non-family businesses

| | Family businesses (assuming that response 1 signifies a family firm) | Non-family businesses | Difference | p-value |
|------------------------------|--|--------------------------|------------|---------|
| Organizational learning -> | 0,154 | 0,158 | 0,004 | 0,971 |
| Organizational slack | | | | |
| Organizational learning -> | 0,220 | 0,308 | 0,088 | 0,332 |
| Organizational effectiveness | | | | |
| Organizational slack -> | 0,562 | 0,433 | 0,129 | 0,147 |
| Organizational effectiveness | | | | |

Source: Own based on research results.

The objective of verifying the second hypothesis pertaining to the role of organizational slack as a mediator in the relationship between organizational learning and organizational efficiency involved estimating the magnitude of the indirect effect (as presented in the table below). The standardized value of the indirect effect (0.076) is relatively modest when compared to the magnitude of the direct effect (0.257; see Table 7 in the structural component estimates). This suggests the presence of partial mediation. Nevertheless, it is statistically significant (p = 0.007).

Table 8.

The results of hypothesis verification concerning mediation

| Statistics | Organizational learning -> Organizational slack > Organizational effectiveness |
|-------------------------|---|
| Mediation effect | 0,076 |
| Mean estimation error | 0,028 |
| p-value | 0,007 |
| 90% confidence interval | (0,024; 0,133) |

Source: Own based on research results.

Based on this, it can be affirmed that a partial verification of Hypothesis 2 has been conducted in a positive manner.

6. Conclusions

The conducted research indicates a significant relationship between organizational learning and organizational effectiveness, as previously cited by other authors (Gonzales, Padron et al., 2010; Hadi, 2023). Furthermore, it has been demonstrated that organizational slack plays a mediating role in the relationship between organizational learning and organizational effectiveness. Similarly, as found in the literature, the conducted research suggests that having organizational slack (specifically in the financial construct used in the study) somewhat strengthens the impact of organizational learning on organizational effectiveness (Zhao, Yan, 2023). Additionally, no significant differences were observed between family-owned and nonfamily-owned firms in the analyzed area. Typically, these firms differ from each other due to the interplay between the company and the family, manifested in organizational structure, the preference for family members in stakeholder care, self-financing of initiatives, the preservation of capital within the family, and "familiness". However, in the examined area, no significant differences were found.

It must be said that the surveys carried out, have limitations due to a certain degree of subjectivity. In the future, the research carried out could be complemented by research of a qualitative nature. In addition, other ways of measuring organizational slack could be used with alternative operationalizations of this construct and with specific quantitative data. In the case of organizational learning processes, effects emerge with a certain time lag and research in this area can be carried out over a period of at least several years.

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