Managers' Empathy and Psychological Capital in Relation to Company Performance: Evidence from Slovenia

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Abstract

Background: In today's dynamic business environment, psychological traits of managers are increasingly seen as key drivers of organisational success. Despite their growing importance, the direct and moderated impact of these traits on company performance remains underexplored. **Objectives:** This study aims to examine the relationship between managers' empathy, self-efficacy, hope, and company performance in Slovenian organisations. It also explores how demographic factors like gender, leadership experience and company size moderate these relationships. **Methods/Approach:** A quantitative study was conducted using a convenience sample of 107 Slovenian managers. Standardised scales were used to measure empathy, self-efficacy, hope, and perceived company performance. **Results:** The results indicate that while empathy was not significantly correlated with company performance, self-efficacy and hope were positively correlated with performance. Demographic variables did not significantly moderate these relationships. **Conclusions:** This study shows that hope is the only managerial psychological trait that remains a significant positive predictor of perceived company performance when traits are considered jointly and demographic variables are controlled for, while company size has a negative effect. No moderating effects of company size, leadership experience, or gender were found.

Keywords: empathy; psychological capital; self-efficacy; hope; positive psychology; organisational psychology; leadership; management; company performance

JEL classification: L19
Paper type: Research article

Received: 11 December 2025
Accepted: 20 July 2026

Acknowledgements: The authors would like to sincerely thank the Managers' Association of Slovenia for their crucial support in disseminating the survey questionnaire among its members. Their assistance played a significant role in the successful implementation of this study.

Citation: Divjak, M. & Jagodič, G. (2026). Managers' Empathy and Psychological Capital in Relation to Company Performance: Evidence from Slovenia. *Business Systems Research, 17*(2), 258-275.
DOI: https://doi.org/10.2478/bsrj-2026-0028

Introduction

The contemporary business landscape is characterised by volatility, rapid technological progress, organisational complexity, and intense global competition. In such conditions, management approaches based solely on technical expertise and process efficiency are increasingly inadequate. Psychological traits of managers, such as emotional intelligence, empathy, and psychological capital, are becoming crucial for long-term success, innovation, and sustaining a competitive edge (Goleman et al., 2013; Luthans & Youssef, 2004; Luthans & Youssef-Morgan, 2017). Leadership grounded only in formal authority and rational decision-making often fails to build trust, motivate employees, and foster creativity – capabilities essential in today's dynamic environment. Thus, examining the psychological traits that impact managers' behaviour and eventually shape company performance is a critical priority in contemporary management research and practice.

This issue is not merely academic; it reflects the real needs of modern organisations for leadership that goes beyond efficiency to create lasting value. From the Resource-Based View (RBV), managers' psychological traits are strategic assets that provide a competitive advantage (Barney, 1991). Intangible qualities such as empathy, self-efficacy, and hope are valuable, rare, and difficult to imitate, enabling firms to stand out in turbulent markets. Upper Echelons Theory (Hambrick & Mason, 1984) further shows that managers' psychological traits shape strategic choices and organisational outcomes. Research on empathy and psychological capital supports leadership models that recognise internal resources as key drivers of success in dynamic contexts (Goleman et al., 2013; Uusiautti, 2016). Examining these traits thus offers insight into how manager-level internal resources combine to influence company performance.

While most similar prior studies have focused on the impact of managers' psychological traits on behavioural outcomes, such as leadership styles or employee engagement, a significant gap remains in empirical research on the relationship between managers' psychological traits and company performance. Studies examining these associations within the context of Slovenian organisations are notably scarce. This study aims to fill this gap by moving beyond behavioural outcomes and exploring how managers' psychological traits, such as empathy, self-efficacy, and hope, influence broader company performance, as measured by financial, operational, and innovation outcomes. A further objective is to test whether demographic variables, such as gender, years of leadership experience and company size, moderate these relationships. This approach seeks to contribute new insights into how psychological traits can function as strategic resources that drive organisational success.

Empathy is a fundamental element of emotional intelligence, defined as the ability to understand and respond to others' emotions (Clark, 2010; Goleman et al., 2013; Decety & Jackson, 2004). Empathic leaders cultivate psychologically safe environments that reduce resistance to change, increase engagement, and encourage commitment (Mahsud et al., 2010; Rafferty & Restubog, 2017). Within the RBV framework, empathy acts as a relational resource that boosts social capital and knowledge sharing, thereby supporting both organisational efficiency and market performance. However, empathy's role in the organisational environment remains underexplored, and empirical findings are mixed: some studies report direct effects on company outcomes (Boyatzis et al., 2006), while others highlight indirect mechanisms such as team cohesion or employee engagement (Clark et al., 2019). Based on these insights, we propose the following hypothesis:

- H1: The manager's empathy is positively correlated with company performance.

Psychological capital (PsyCap) refers to a positive psychological state in organisational settings, composed of four key dimensions: self-efficacy, hope, optimism, and resilience (Luthans et al., 2007; Luthans & Youssef-Morgan, 2017). Unlike broader personality dimensions (e.g., the Big Five), which tend to be more stable and enduring over time, these resources are malleable and can be developed, aligning with the principles of Positive Organisational Behaviour (Luthans & Youssef-Morgan, 2017). This study focuses specifically on self-efficacy and hope for two main reasons: first, previous research has demonstrated that managers with higher levels of self-efficacy and hope are better equipped to manage uncertainty, drive change, and lead effectively (Avey et al., 2011); self-efficacy and hope are key drivers of intrinsic motivation and goal-directed behaviour, which are particularly relevant for successful company performance. Second, this focus allows for a streamlined survey, increasing the likelihood of obtaining responses from top managers, a particularly demanding and hard-to-reach target group.

Self-efficacy pertains to an individual's belief in their capacity to handle challenges and reach goals, offering the confidence needed to carry out complex tasks (Bandura, 1977; 2001). Research indicates it is closely associated with improved work performance, as it encourages persistence, responsibility, and effectiveness in tackling demanding tasks (Stajkovic & Luthans, 1998a). Managers with high self-efficacy are therefore more likely to make proper strategic decisions, promote their ideas, and influence colleagues. Hope represents goal-directed energy and the capacity to generate pathways toward achieving objectives (Snyder et al., 1991; Snyder, 2002). It encompasses both motivation and the ability to identify alternative strategies when obstacles arise. Research links hope to greater work engagement and proactivity, fostering innovative problem-solving and sustained focus on long-term goals (Peterson & Luthans, 2003). In managerial contexts, hopeful leaders are more effective at motivating teams and cultivating environments where employees remain persistent, creative, and result-oriented. Based on these insights, we propose the following hypotheses:

- H2: The manager's self-efficacy is positively correlated with company performance.
- H3: The manager's hope is positively correlated with company performance.

Building on existing theories, we propose that managers' psychological traits, empathy, self-efficacy and hope, jointly influence company performance, even when controlling for demographic variables. Contextual factors such as company size, leadership experience or gender may moderate their impact. Prior studies highlight demographic differences in PsyCap and empathy, particularly by gender (Tejada & Camino, 2024; Rochat, 2023; Villanueva-Flores et al., 2021), which forms the basis for our final hypothesis.

- H4: The manager's gender, years of leadership experience and company size moderate the relationship between the manager's psychological traits and company performance.

In the next section, we briefly outline the theoretical foundations by introducing the key concepts and summarising prior research on the relationship between managers' psychological traits and company performance. We then describe the research methodology of the present study, including the data analysis procedures. This is followed by a presentation, interpretation, and discussion of the main findings. The paper concludes with a brief conclusion.

Theoretical background

Empathy

Empathy is a key aspect of emotional intelligence, enabling individuals to perceive, understand, and respond to others' emotions (Goleman et al., 2013). In leadership, it reflects a manager's ability to understand team members' perspectives, recognise their needs, and align emotional responses with organisational goals. Decety and Jackson (2004) distinguish two components: affective resonance, an emotional reaction to others' experiences, and cognitive perspective-taking, the ability to understand others' thoughts and feelings. This multidimensional view of empathy is vital for navigating social dynamics, resolving conflicts, and staying aligned with organisational objectives.

Empathy aligns closely with transformational leadership, which focuses on individualised support and developing employees' potential (Bass & Riggio, 2006). Transformational leaders recognise emotional needs and adapt their support, making empathy a vital leadership skill and not just a personality trait. It fosters trust and genuine connections within organisations (Kock et al., 2019). Empathetic leaders create psychological safety, encourage open communication, collaboration, and knowledge sharing – all essential for innovation and performance (Men, 2011; Anderson et al., 2014). They also help manage cultural differences and strengthen organisational cohesion (Decety & Jackson, 2004; Goleman et al., 2013).

Contemporary organisational literature increasingly highlights empathy as a core leadership competency, especially in transformational leadership, ethical decision-making, and sustainable development (Goleman et al., 2013). Empathy helps leaders build trust, foster psychological safety, and promote intrinsic motivation, which are key drivers of team and company performance. According to Upper Echelons Theory (Hambrick & Mason, 1984), managers' psychological traits, including empathy, shape organisational outcomes. Empathetic executives tend to make stakeholder-focused decisions, enhancing adaptability and long-term competitiveness. Leader empathy also boosts employee engagement and reduces turnover, making it a strategic asset for sustainable competitive advantage.

Psychological capital

Psychological Capital (PsyCap) is a central concept in positive organisational behaviour that extends beyond traditional human capital. It comprises four psychological resources, self-efficacy, hope, optimism, and resilience, that reflect an individual's positive psychological state in an organisational environment (Luthans & Youssef, 2004; Luthans et al., 2007). Within leadership frameworks, PsyCap serves as both a resource and an outcome. In transformational leadership, leaders with high PsyCap show greater confidence and optimism, which influence followers through role modelling and social learning (Setioningtyas et al., 2024). From a Resource-Based View (Barney, 1991), PsyCap is a valuable, rare, and hard-to-imitate intangible asset that enhances adaptability, creativity, and strategic flexibility. In the following sections, we provide more details on the two components of PsyCap, self-efficacy and hope, included in this study.

Self-efficacy

Self-efficacy, central to Bandura's social cognitive theory (1977; 2001), refers to a person's belief in their ability to achieve specific goals. It goes beyond skills to include mental, motivational, emotional, and behavioural dimensions (Bandura, 1984; 2001). Individuals with high self-efficacy tend to set ambitious goals, persist through

challenges, and apply proactive problem-solving (Stajkovic & Luthans, 1998b). This belief is key to human agency, shaping choices, effort, and resilience in the face of setbacks (Bandura, 2001; Irvayanti & Sopiah, 2022).

Bandura (2001) outlines four key sources of self-efficacy: mastery experiences, observational learning, social persuasion, and interpretation of emotional or physiological states. These elements shape self-efficacy over time through personal and professional experiences. In organisations, managers strengthen employees' self-efficacy by modelling behaviour, setting clear expectations, and providing support (Lord & Brown, 2004; Buenaventura, 2017).

As a component of psychological capital, self-efficacy is strongly linked to positive organisational outcomes. Meta-analyses show it enhances job performance, persistence, and resistance to frustration (Stajkovic & Luthans, 1998b). Individuals with high self-efficacy view tasks as less complex, take initiative, and learn more effectively, which is an advantage in fast-changing environments (Park & Park, 2019; Irvayanti & Sopiah, 2022). In leadership, it boosts managerial effectiveness by fostering collective efficacy and psychological safety (Hannah et al., 2008; Peterson & Luthans, 2003). Such leaders encourage innovation, experimentation, and adaptability (Buenaventura, 2017). Self-efficacy also supports emotional regulation and resilience, reducing procrastination and improving collaboration (Bandura, 1984; Park & Park, 2019). It is a strategic resource that drives individual and organisational success.

Hope

Hope, a key dimension of psychological capital, is a cognitive construct that integrates goal setting, pathway generation, and motivation to overcome obstacles (Snyder et al., 1991). Rather than passive wishing, Snyder's theory defines hope as an active process with two components: agency ("willpower") and pathways thinking ("waypower"). Agency drives goal pursuit, while pathways thinking enables flexible strategies in the face of setbacks (Snyder, 2002). This dual structure makes hope a dynamic, developable resource, not a fixed trait.

Employees with high levels of hope tend to be more engaged, resilient, and proactive in finding alternative paths to their goals (Luthans, 2002). They view challenges as temporary detours requiring creative solutions – a valuable mindset in today's fast-changing work environments (Irvayanti & Sopiah, 2022). Managers who demonstrate hope positively shape employee expectations and strengthen commitment to organisational goals (Peterson & Luthans, 2003).

Research consistently links hope to positive organisational outcomes, including job satisfaction, commitment, and well-being (Luthans et al., 2007). Meta-analyses also identify hope as a strong predictor of job performance across roles and industries (Irvayanti & Sopiah, 2022). This positions managerial hope not just as a personal trait but as a strategic asset that enhances team productivity and company performance.

Company performance

In contemporary management and academic discourse, corporate performance is no longer defined solely by financial profit. Traditional metrics like balance sheets and economic indicators capture only part of an organisation's reality. Today, performance is viewed as a multidimensional concept that includes the ability to achieve strategic and operational goals in complex, fast-changing environments (Richard et al., 2009; Jagodič, 2018).

Financial indicators remain a fundamental part of performance measurement. Metrics such as return on assets (ROA), return on equity (ROE), EBITDA, and market capitalisation provide internationally comparable insights into how companies create

economic value and maintain liquidity and solvency (Hitt et al., 2016). Yet research cautions that focusing exclusively on financial results risks producing a one-sided and potentially misleading picture of company performance (Morgan et al., 2002). Such an approach neglects non-financial factors that, while not directly captured in financial statements, play a critical role in sustaining long-term competitive advantage.

Beyond financial metrics, modern perspectives on company performance highlight additional dimensions, with internal efficiency among the most critical. It reflects how well operational processes are optimised, errors are reduced, productivity is improved, and responsiveness to demand fluctuations is enhanced (Slack et al., 2010). Companies with flexible, lean processes are more resilient to external shocks and better equipped to seize new opportunities. Key indicators include production cycle time, process adaptability, and defect or complaint rates (Lee & Johnson, 2013).

Beyond internal processes, market performance is essential for long-term organisational success. It includes metrics such as market share, revenue growth, and brand recognition, reflecting a company's ability to meet customer needs and drive innovation. Market performance reveals both current competitiveness and future growth potential.

In recent decades, non-financial performance indicators, especially employee satisfaction, have become increasingly important. Research shows that satisfied employees are more engaged, loyal, and innovative, which reduces turnover and absenteeism (Judge et al., 2001; Baxi & Atre, 2024). Beyond boosting productivity, employee satisfaction matters because employees serve as company ambassadors, shaping its public image and reputation (Men, 2011).

Company success stems from dynamic interactions among strategic leadership, psychological resources, organisational culture, and market adaptability. Modern performance views extend beyond financial results to include operational efficiency, market growth, and stakeholder satisfaction (Richard et al., 2009). Integrating empathy and psychological capital (PsyCap) into leadership theory offers a multi-level understanding of performance. Empathy supports transformational leadership by building trust and promoting learning, while PsyCap enhances decision-making and goal-directed behaviour, aligning with the Resource-Based View's focus on unique intangible assets (Barney, 1991). These theories show how psychological resources shape outcomes: transformational leadership drives engagement, RBV treats them as strategic assets, and Upper Echelons Theory highlights their executive-level impact. Financial metrics alone can't sufficiently capture success; long-term competitiveness also depends on "soft" factors like motivation, emotional intelligence, and adaptability.

The relationship between empathy and company performance

Empathy is increasingly recognised as a key psychological factor that influences organisational success. Though often viewed as a personal trait, research highlights its strategic value. Managers who lead with empathy create environments where employees feel heard, valued, and understood, thus boosting commitment and alignment with shared goals (Boyatzis et al., 2006). By reducing conflict, strengthening relationships, and fostering cooperation, empathy becomes a foundation for long-term organisational stability.

Organisations led by empathetic managers consistently show higher employee motivation, productivity, and lower turnover. In these environments, employees develop stronger loyalty and identification with the company, improving service quality and market reputation (Goleman et al., 2013). Empathetic managers also

promote creativity and innovation, which is crucial in an era where adaptability is a key competitive advantage (Kurgat & Kamaara, 2022). They further support organisational change by reducing uncertainty and increasing employees' willingness to cooperate (Buenaventura, 2017).

In innovation, empathy serves as a powerful driver of creativity. Managers who consider others' perspectives create space for dialogue, enabling less obvious ideas to surface. This openness fosters diversity of thought and uncovers user needs often missed by traditional research (Brown, 2009). Empathetic leadership also promotes knowledge sharing and collaboration, enhancing team creativity. Organisations that cultivate these dynamics are better positioned to innovate, develop novel solutions, and build sustainable competitive advantages (Gerdes et al., 2010).

From a market-competitiveness standpoint, empathy influences not only internal dynamics but also external relationships. It deepens understanding of customer behaviour and helps anticipate market shifts. By empathising with user experiences, companies can offer personalised products and communication that enhance perceived value and loyalty (Clark et al., 2019). Empathy also strengthens stakeholder relations by fostering trust and credibility, with companies increasingly evaluated by the quality of their relationships as a vital advantage (Kernbach et al., 2015).

Empathy also shapes organisational culture more broadly. Companies that embed empathy into their practices tend to foster internal unity, improve adaptability, and manage change more effectively in fast-paced environments. These organisations are better positioned to sustain competitiveness by identifying and meeting the needs of employees, customers, and partners (Arghode et al., 2022).

Empathy is more than a personal trait; it's a strategic tool for creating value, building resilience, and driving lasting success, and it requires intentional development. Its strategic value lies in activating and integrating human capital, which is the most vital resource in today's knowledge-driven economy.

The relationship between psychological capital and company performance

In today's complex and unpredictable business environment, psychological capital (PsyCap) is a crucial internal resource. It enables individuals and teams to handle challenges, remain proactive under pressure, and support long-term competitive advantage (Avey et al., 2011).

Research consistently shows that the components of psychological capital significantly support organisational success. Employees with high self-efficacy are more likely to take initiative, stay engaged, solve complex problems, and adapt in uncertain conditions (Luthans & Youssef, 2007). This sense of control also reduces stress and supports rational decision-making. Similarly, hope plays a crucial role not only in expecting positive outcomes, but also in generating multiple pathways to goals and persisting through challenges. High-hope individuals are typically more creative, intrinsically motivated, and solution-oriented even under pressure (Snyder, 2002).

At the organisational level, psychological capital enhances operational efficiency, adaptability, and the ability to navigate uncertain market conditions. Employees with strong resilience and optimism are better equipped to handle setbacks, view them as learning opportunities, and quickly pursue new solutions. This fosters agility and long-term stability. Such individuals are also more innovative and open to complex transformations, which is critical during periods of digital and sustainable change (Sweetman et al., 2011).

In the innovation context, psychological capital plays a dual role. It fosters psychological safety, encouraging experimentation, idea-sharing, and learning from

mistakes, and supports behaviours essential to innovation, such as curiosity, initiative, and risk-taking. Within this framework, self-efficacy and hope are especially important, helping employees trust their abilities and envision multiple paths to success (Luthans & Youssef, 2007). Meta-analyses show strong links between PsyCap and outcomes like creativity, well-being, and organisational citizenship (Irvayanti & Sopiah, 2022).

For all these reasons, developing psychological capital is increasingly seen as a strategic asset in modern HR management. PsyCap is not just a personality trait but a capability that can be intentionally cultivated. Research shows it can be strengthened through resilience training, coaching, transformational leadership, and a growth-oriented, psychologically safe culture (Luthans & Youssef, 2007). Organisations that invest in PsyCap build more satisfied, resilient employees and lay the groundwork for sustainable growth, innovation, and competitiveness.

Methodology

The adopted quantitative research follows a cross-sectional research design. A structured online survey was developed and hosted on the 1ka platform. Data collection occurred from 13 March to 9 May 2025.

The research targeted top managers from Slovenian companies and organisations who are members of the Managers' Association of Slovenia, which supported the study. Over 1,200 managers were invited to participate via an email containing a survey link and a follow-up reminder. A total of 107 managers completed the survey, representing nearly 10% of the target group. The sample was non-random and based on convenience and self-selection, limiting the generalisability of the findings.

The sample is composed of 64.8% male and 35.2% female managers. Respondents have 15.8 years of leadership experience on average (SD = 9.57). The percentage of managers from micro (up to nine employees) and large companies (250 employees and more) is similar: 17.9% and 17.0%, respectively. One-third of respondents (36.8%) manage small companies (10-49 employees), and 28.3% of respondents manage medium-sized companies (50-249 employees). Almost three-quarters of managers reported that their companies were fully owned by domestic (Slovenian) investors, and 16.8% of managers reported that their companies were fully owned by foreign investors.

The questionnaire was comprised of three thematic sections. The first section referred to demographic data (e.g., gender, leadership experience, number of employees – company size, company ownership) to enable sample profiling and explore potential moderating effects. The second section focused on psychological traits, empathy and two components of psychological capital: self-efficacy and hope. Empathy was measured using the 13-item Empathy Assessment Scale (Malakcioglu, 2022) with responses on a 5-point Likert scale. Psychological capital was assessed using the Psychological Capital Questionnaire (Luthans et al., 2007), focusing on the self-efficacy and hope subscales, each with six items rated on a 6-point Likert scale, as prescribed by the authors. The levels of the 6-point Likert scale were as follows: strongly disagree, disagree, somewhat disagree, somewhat agree, agree, strongly agree. The third section evaluated company performance through managers' subjective assessments, using an eight-item multidimensional scale covering financial, market, and stakeholder indicators (Richard et al., 2009), rated on a 5-point Likert scale.

Data analysis was carried out using IBM SPSS Statistics and JASP. Firstly, a reliability analysis of the scales was performed using Cronbach's alpha. This was followed by descriptive analysis of managers' psychological traits and company performance, including the mean, standard deviation, minimum, and maximum. Descriptive analysis

was conducted at the scale level, not at the item level. Scales for psychological traits and company performance were calculated by summing the scores of all the items corresponding to a particular scale. For example, the self-efficacy score was obtained by summing the scores of all six items that measure self-efficacy. To examine associations between managers' psychological traits and company performance and to test hypotheses H1-H3, Spearman's correlation coefficients were calculated. Finally, to examine the moderating effects of selected demographic variables on the relationships between managers' psychological traits and company performance and to test the hypothesis H4, a hierarchical linear regression analysis was conducted with company performance as the dependent variable. Hierarchical linear regression was also used to examine the predictive value of managers' psychological traits while controlling for demographic variables, such as gender, years of leadership experience, and company size. The hierarchical linear regression analysis was performed in three steps. In the first step (model M1), empathy, self-efficacy, and hope were entered as predictors to assess the main effects of psychological traits. In the second step (model M2), demographic variables were added to test the stability of the effects of psychological traits while controlling for gender, years of leadership experience and company size. Finally, in the third step (model M3), the interaction terms were added to the model to test whether demographic variables moderate the relationship between managers' psychological traits and company performance. In addition, the collinearity diagnostics were performed to assess the reliability and validity of the regression models, with VIF values above 10 indicating unacceptable multicollinearity of predictors.

Results

As shown in Table 1, the empathy, self-efficacy, hope, and performance scales demonstrated sufficient reliability. The original empathy scale consisted of 13 items. One item ("I don't go after someone angry.") was removed to increase the scale's reliability above 0.70.

On average, managers reported very high levels of self-efficacy and hope (33.6 and 31.4 points, respectively, out of 36 in total for each scale), along with moderate to high levels of empathy (42.3 points out of 60 in total). They seem highly confident in their abilities, goal-focused, and persistent in pursuing their objectives. Furthermore, they show the capacity to adapt their efforts and strategies as needed. However, they appear somewhat less empathetic in recognising others' emotions and aligning their behaviour with others' feelings and actions. Additionally, managers' perception of company performance was rated moderate to high on average (30.4 points out of 40). There are evident differences in data variability across scales with standard deviations being substantially higher for empathy and performance. In other words, data for self-efficacy and hope demonstrate higher homogeneity.

Table 1
Descriptive statistics of managers' psychological traits and company performance

	Scale reliability		Scale statistics				Normal distribution	
Scale	**Items**	**Cronbach alfa**	**M**	**SD**	**Min**	**Max**	**Shapiro-Wilk**	**p**
Empathy	12	0.732	42.3	5.54	30.0	56.0	0.987	0.396
Self-efficacy	6	0.824	33.6	2.68	24.0	36.0	0.825	< 0.001
Hope	6	0.729	31.4	2.86	22.0	36.0	0.954	< 0.001
Performance	8	0.865	30.4	5.21	12.0	40.0	0.960	0.003

Source: Authors' work

Since the distributions of most scales (self-efficacy, hope, and performance) deviate significantly from normality, Spearman's rho was used to calculate correlations among the scales (Table 2).

Managers' empathy is not significantly linked to company performance. There is insufficient evidence to reject the null hypothesis that there is no relationship between the two variables, so the proposed alternative hypothesis (H1) cannot be supported.

In contrast, the psychological capital dimensions, self-efficacy and hope, are moderately and positively correlated with company performance. With a margin of error of less than 1%, there is strong evidence to reject the null hypothesis of no correlation. Consequently, the alternative hypotheses (H2 and H3) can be accepted with high confidence.

Table 2
Correlations of managers' psychological traits with company performance

Scale	E	S	H	P
Empathy (E)	1.00	0.243**	0.193**	0.043
Self-efficacy (S)		1.00	0.554*	0.337*
Hope (H)			1.00	0.387*
Performance (P)				1.00

Note: Spearman rho correlation coefficients were calculated. *Significant at $p < 0.01$; **Significant at $p < 0.05$
Source: Authors' work

Tables 3 and 4 summarise the results of the hierarchical linear regression analysis, used to predict company performance based on psychological traits, demographic variables, and their interaction terms (moderators). Managers' psychological traits, empathy, self-efficacy, and hope together explained nearly 13% of the variance in company performance (model M1), with hope being the only statistically significant predictor (Table 4). A higher level of hope is related to better company performance.

Adding gender, years of leadership experience, and company size as additional predictors in model M2 significantly improved the explanatory power of the regression model. Managers' psychological traits and demographic variables together accounted for 21% of the variance in company performance (Table 3). Hope maintained its predictive power, even when controlling for demographic variables, while company size also demonstrated a significant negative effect on company performance (Table 4). Lower company size is associated with better company performance.

Next, adding interaction terms (moderators) in model M3 in the final step did not further improve the explanatory power of the regression model (Table 3); R^2 change was minimal and statistically insignificant ($p = 0.550$). Adding interaction terms contributed to high VIF (Variance Inflation Factor) across all predictors in model M3, with VIF values far above 10, indicating a high degree of multicollinearity. Because of high multicollinearity, which usually distorts the estimated relationships between the predictors and the outcome variable, none of the predictors in the final model was statistically significant in relation to company performance. This indicates that neither gender, years of leadership experience, nor company size moderates the relationships between managers' psychological traits and company performance. Accordingly, the null hypothesis cannot be rejected, and Hypothesis H4 is not supported.

Table 3
Hierarchical linear regression to predict company performance: model summary

Model	R	Adjusted R^2	F change	Df1, df2	p
M1	0.388	0.125	5.865	3, 99	< 0.001
M2	0.506	0.210	4.546	3, 96	0.005
M3	0.564	0.201	0.876	9, 87	0.550

Note: Dependent variable: company performance. Model M1 predictors: empathy (E), self-efficacy (S), hope (H). Model M2 predictors: empathy (E), self-efficacy (S), hope (H), company size (C), leadership experience (L), gender (G). Model M3 predictors: empathy (E), self-efficacy (S), hope (H), company size (C), leadership experience (L), gender (G), E*C, E*L, E*G, S*C, S*L, S*G, H*C, H*L, H*G.
Source: Authors' work

Table 4
Standardised regression coefficients and multicollinearity diagnostics

		Standardised coefficient	t	p	VIF
M1	(Intercept)		0.741	0.461	
	Empathy	-0.011	-0.112	0.911	1.055
	Self-efficacy	0.122	1.088	0.279	1.475
	Hope	0.309	2.763	0.007	1.459
M2	(Intercept)		0.691	0.491	
	Empathy	-0.005	-0.052	0.958	1.240
	Self-efficacy	0.146	1.357	0.178	1.504
	Hope	0.338	3.157	0.002	1.479
	Company size	-0.323	-3.572	< 0.001	1.055
	Leadership experience	0.041	0.457	0.649	1.048
	Gender	0.036	0.377	0.707	1.186

Note: Dependent variable: company performance. Only the regression coefficients for M1 and M2 are shown. Due to high multicollinearity (VIF for all predictors above 10), the estimates for M3 proved invalid and unreliable.
Source: Authors' work

In summary, self-efficacy and hope were positively correlated with perceived company performance, while the correlation with empathy was not statistically significant. In the adjusted regression model, hope was the only psychological trait with a statistically significant positive association with perceived performance. Company size showed a significant negative association. High multicollinearity in the interaction model precluded reliable conclusions about whether these relationships varied by company size, leadership experience, or gender.

Discussion

This study explored the relationship between managers' psychological traits, empathy, self-efficacy, and hope, and their perceived company performance in Slovenia. The country's socio-economic setting, characterised by dense business networks, a limited managerial labour market, and close interpersonal ties, makes leadership dynamics particularly significant.

Contrary to expectations and prior research (e.g., Boyatzis et al., 2006; Goleman et al., 2013; Arghode et al., 2022), managers' empathy was not significantly correlated with perceived company performance, thereby rejecting Hypothesis H1. Additionally, demographic variables such as gender, years of leadership experience, and company size did not significantly moderate the relationship between managers' empathy and company performance.

However, these findings do not undermine the importance of empathy in contemporary organisational settings. Rather, they suggest that the relationship between managers' empathy and company performance is more complex and might be mediated by employee-level factors such as trust, perceived organisational support (José et al., 2025), employee concern, control, curiosity, confidence (Ma et al., 2024), and employee engagement (Mphaluwa et al., 2025), among others.

It is also plausible that these effects may be stronger when empathy is measured at the middle management level, rather than the top management level, as in this study. Middle managers are more directly involved with employees on a regular basis and thus exert a greater impact on their behaviours and performance indicators. For example, one study found that job happiness mediated the relationship between direct supervisors' managerial empathy and organisational performance (Sundayana et al., 2025).

The current study found that self-efficacy and hope, two components of psychological capital, are moderately and positively correlated with perceived company performance, thus supporting Hypotheses H2 and H3. These findings are consistent with prior research (e.g., Snyder, 2002; Luthans & Youssef, 2007; Avey et al., 2011; Ziyae et al., 2015), which highlights the role of a manager's confidence in overcoming challenges (self-efficacy) and goal-driven persistence (hope) in influencing various performance-related indicators, such as export performance (Abdanour & Ait Errays, 2024) and employee innovative behaviour (Wang et al., 2021). However, when self-efficacy, hope, and empathy were analysed together to predict company performance, while controlling for demographic variables, only hope emerged as a statistically significant predictor. This suggests that managers should prioritise hope in selection and development. Managers who can envision multiple paths to organisational goals, remain goal-directed and persistent, and effectively navigate the pathways toward these goals appear better equipped to sustain performance.

Managers' psychological traits jointly explained nearly 13% of the variance in company performance. When demographic variables were added, the explained variance increased to 21%, with hope and company size emerging as significant predictors. Company size was negatively associated with company performance, indicating that managers of companies with fewer employees rated their companies' performance more favourably than managers of larger companies. One plausible mechanism is leader–operations alignment: in smaller companies, managers typically have closer contact with day-to-day operations and greater managerial discretion; as a result, their personal influence is more likely to translate into company-level outcomes (Hambrick & Mason, 1984). By contrast, OECD (2025) reports that, across OECD countries, larger companies generally achieve higher labour productivity than smaller companies, although this pattern varies by industry. Because OECD focuses on labour productivity, whereas our study conceptualised performance more broadly and relied on manager-reported assessments, the findings are not directly comparable. Overall, the size–performance relationship is likely contingent on the performance metric, sectoral composition, and institutional context.

Including interaction terms in the final step of the hierarchical regression analysis did not further improve the model's predictive power, indicating that demographic variables did not moderate the relationships between managers' psychological traits and company performance, thereby rejecting Hypothesis H4. These findings suggest that, contrary to prior expectations, the impact of managers' psychological traits, particularly hope, which exerted a stable main effect, is consistent across demographic groups, regardless of gender, leadership experience, or company size.

This aligns with previous studies, such as Avey et al. (2011), who found that PsyCap's impact on performance outcomes was significantly positive across various demographic groups, including gender and tenure. However, in this study, PsyCap and performance were measured at the employee level, not at the top-management level, as in our study. Overall, the role of moderators appears to be mixed and likely depends on factors such as study design, the conceptualisation of performance, and the specific methods used to measure performance indicators.

Study limitations and future research

This study had several limitations which might have influenced the results. First, a key limitation is its reliance on self-reported company performance based solely on managers' perceptions. While the measure was reliable, its validity couldn't be confirmed because the study's anonymity prevented linking responses to objective performance data. This raises uncertainty about how accurately managers' assessments reflect actual performance outcomes. Future research should combine subjective and objective measures, as already suggested by Richard et al., 2009.

Second, the Empathy Assessment Scale used in this study was designed to measure general empathy rather than work-related empathic leadership (Kock et al., 2019). This may have limited its relevance to organisational outcomes, explaining the non-significant relationship with company performance. Future research should use context-specific tools to better understand empathy's role in company performance.

Third, the sample included only top managers of the Managers' Association of Slovenia, limiting generalisability beyond this network and beyond a country-specific context. Including middle- and lower-level managers in future studies might be beneficial, as they are more directly involved in operational processes and may exert stronger influence on employee-level performance measures.

Fourth, the small sample size may have limited the statistical power to detect small but significant effects, potentially masking subtle main and interaction effects. Considering the rule of thumb of 15-20 sample units per predictor in the hierarchical regression analysis, the sample size was sufficient for testing the main effects of managers' psychological traits and demographic variables on company performance. However, the sample size became insufficient when interaction terms were added to the regression model, with 15 predictors in the final step, which may have contributed to an unstable, invalid model, high multicollinearity among predictors, and none of the predictors being statistically significant. Future research with a larger, more representative sample could provide clearer insights.

Fifth, the cross-sectional research design limits causal inference. Longitudinal, quasi-experimental and mixed-methods research designs in Slovenia and similar small European economies could better explore causal determinants of company performance.

Another implication for future research stems from the relatively low proportion of variance in company performance explained by managers' psychological traits and demographic variables. Although empathy, self-efficacy, and hope may shape managerial behaviour, these traits do not fully capture how managers lead in practice. In workplace settings, how managers behave often matters more for organisational outcomes than who they are. Leadership styles reflect not only managers' personality traits but also the interaction between those traits, employee attributes, and organisational context. Therefore, incorporating leadership styles as mediators of the personality–performance relationship may substantially improve the prediction of company performance, as suggested by prior research (e.g., Xie et al., 2023). Future research should also broaden the set of managerial traits relevant to

organisational contexts, for example, by including the Big Five personality dimensions, additional components of emotional intelligence beyond empathy (e.g., emotion regulation), and the remaining Psychological Capital components, namely optimism and resilience.

Conclusion

This study provides empirical evidence from Slovenia, a country that is still underrepresented in management research, and contributes to theory by clarifying how top managers' psychological traits relate to perceived company performance, which remains insufficiently explored. The results indicate that managers' self-efficacy and hope, two core components of psychological capital, are significantly and positively correlated with company performance, whereas empathy is not.

When empathy, self-efficacy, and hope were examined simultaneously as predictors of company performance, while controlling for demographic variables, only hope remained a significant positive predictor. Company size showed a significant negative effect, indicating better company performance in small-size companies. In addition, company size, leadership experience, and gender did not moderate the relationships between psychological traits and company performance.

Among the traits examined, hope, defined by agency ("willpower") and pathways ("waypower"), appears to be the most critical psychological resource for managers operating in volatile business environments and, in turn, for better company performance. Highly hopeful managers do not merely wish for favourable outcomes; they set meaningful goals, sustain motivation, and flexibly adapt their strategies when obstacles arise. From a practical perspective, hope can be strengthened through relatively simple techniques and interventions, such as structured goal setting and scenario-planning exercises.

Future research should address the current study's limitations and further examine the complex relationships between managers' psychological traits and company performance.

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