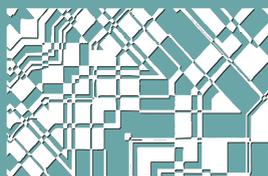
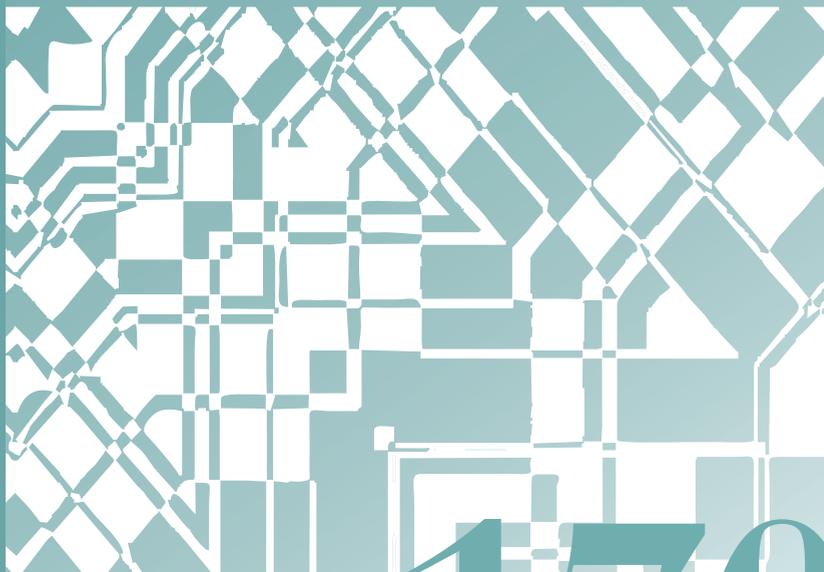


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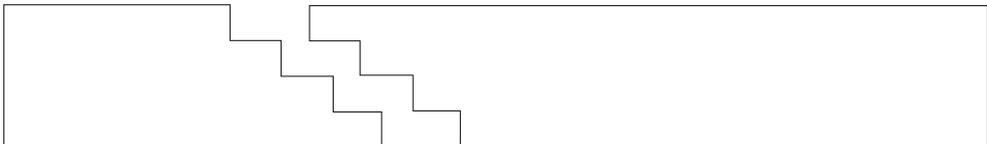
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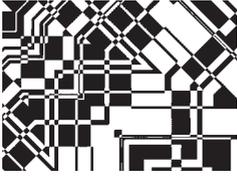
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# HOW DO ETHICAL LEADERS PROMOTE EMPLOYEES' FEEDBACK-SEEKING BEHAVIOURS? A SERIAL MEDIATION MODEL

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This study explores how ethical leadership fosters employees' feedback-seeking behaviours. Drawing on Self-Determination Theory, the research identifies intrinsic motivation and affective commitment as key mediators through which ethical leaders encourage proactive feedback-seeking. The findings reveal that ethical leadership positively influences employees' intrinsic motivation and affective commitment to the organisation, which in turn enhances their tendency to feedback – an essential behaviour in dynamic and quality-sensitive work environments such as manufacturing. To empirically test this model, a cross-sectional survey was conducted among 422 employees at a large manufacturing plant in Manisa, Türkiye. The results support a serial mediation model, confirming that ethical leadership indirectly promotes feedback-seeking behaviours through increased intrinsic motivation and affective commitment.

Keywords: ethical leadership, intrinsic motivation, affective commitment, feedback-seeking behaviour



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## INTRODUCTION

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Feedback-Seeking Behaviour (FSB) holds substantial importance for organisational development, particularly in rapidly changing work environments (Zhu et al., 2023). Many employees find themselves in a feedback vacuum, especially in knowledge-based organisations, where they may struggle to assess the work of experts (Lee & Kim, 2021). Employees who actively seek feedback tend to report higher levels of job satisfaction (Ozturk et al., 2021) and improvements in performance. The prevalence of FSB within an organisation not only helps inexperienced employees better understand role expectations but also enhances the performance of more experienced staff (Gong et al., 2017). Consequently, FSB contributes positively to organisational success while helping employees develop their knowledge and skills (Cheng et al., 2023). Furthermore, this behaviour also cultivates active communication with leaders (Lee & Kim, 2021), which enhances overall organisational performance and effectiveness (De Stobbeleir et al., 2011). It initiates a continuous cycle of motivation, learning, and development, ultimately boosting both individual and collective performance within the organisation (Zhou et al., 2024).

Many studies suggest that FSB has a positive impact on employee performance, job satisfaction, career development, and a reduction in employee turnover (Cheng et al., 2023). Nevertheless, despite its recognised benefits, employees often refrain from actively seeking feedback in organisational settings due to perceived costs – such as the time required – and the psychological discomfort stemming from potential criticism or threats to their self-image (Parker & Collins, 2010). Despite these limitations, scholars have emphasised the importance of understanding how to encourage employees to engage in proactive FSB (Sherf & Morrison, 2020).

Recent research provides strong evidence for the central role of leadership in shaping employees' attitudes and behaviours, concluding that leaders significantly influence the development of FSB (Kim et al., 2024). Organisational growth is supported when employees receive active feedback from their leaders. Indeed, prior studies have shown that servant leadership (Huo & Liu, 2023), transformational leadership (Cheng et al., 2023), inclusive leadership (Song et al., 2023), and ethical leadership (Qian et al., 2017) positively affect FSB. These leadership styles motivate employees from diverse cultural backgrounds to seek feedback, thereby contributing to organisational success (Fruhen et al., 2022).

Despite these advancements, how and why Ethical Leadership (EL) influences FSB remains insufficiently understood. Exploring the impact of EL on employees' FSB is both theo-

retically and empirically valuable (Qian et al., 2017). The influence of EL on such behaviours is inherently complex (Qin et al., 2021), as feedback seeking is not a one-time behaviour but a repeated process influenced by varying intrinsic factors (Cheng et al., 2023). Studies have identified several moderating and mediating variables – such as emotional intelligence (Qian et al., 2017), traditionality (Qin et al., 2021), intrinsic motivation (Cheng et al., 2023), and duty orientation (Moss et al., 2020) – that shape this process.

Drawing on Self-Determination Theory (SDT) (Ryan & Deci, 2017), individuals are inherently motivated by the fulfilment of their needs for competence, relatedness, and autonomy. When these psychological needs are met, Intrinsic Motivation (IM) and Affective Commitment (AC) are strengthened (Schrock et al., 2023; Ma et al., 2023).

Nonetheless, despite the emergence of a growing nomological network and supporting empirical evidence, little is still known about the emotional and motivational mechanisms that drive FSB in employees (Valcea et al., 2011). Addressing this gap, the current study investigates the serial mediating role of IM and AC in explaining how EL promotes employees' FSB. This study is the first, to our knowledge, to empirically test the joint mediating effects of these two variables. Accordingly, it contributes to the literature by offering a deeper understanding of the psychological processes that motivate employees to seek feedback.

## **DEVELOPMENT OF HYPOTHESES**

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FSB is increasingly recognised as a vital component of organisational development, particularly in today's dynamic and rapidly evolving work environments. It contributes significantly to employee job satisfaction, performance, and career advancement (Qian et al., 2022). Given its developmental potential, understanding the antecedents of FSB has become a central concern in organisational behaviour research.

Among these antecedents, leadership has been identified as a critical driver. Leaders who attend to the psychological needs of their followers tend to foster more effective FSB (Alavi, 2024). In this regard, the present study draws upon SDT as a foundational framework to explain the motivational mechanisms underlying FSB. SDT posits that when individuals experience satisfaction of their basic psychological needs – namely autonomy, competence, and relatedness – they are more likely to exhibit self-determined behaviours (Bilal et al., 2021). This theory offers a compelling lens through which to explore how EL can influence motivational and behavioural outcomes (Ouakouak et al., 2020).

Specifically, SDT helps explain how social-contextual factors, such as leadership style, interact with psychological need satisfaction to shape IM and AC (Alamri et al., 2020). Ethical leaders, through their fairness, integrity, and concern for others, are likely to create a supportive environment that fulfils these needs, thereby enhancing employees' motivation to seek feedback. From this perspective, it is proposed that EL positively affects FSB by fostering IM and strengthening AC.

## **Feedback-seeking behaviours and ethical leadership**

Numerous studies characterise FSB as the act of soliciting input or evaluation from others to enhance personal and professional growth, vital for learning and development (Leenknecht & Carless, 2023; De Stobbeleir et al., 2011). Employees adjust their behaviour based on feedback to succeed in organisations. Recent research indicates that FSB facilitates employees' understanding of organisational performance (Anseel et al., 2015), fostering adaptable relationships and self-awareness (Laudel & Narciss, 2023). However, this process demands significant time and resources yet remains crucial for organisational progress.

Ethical leaders promote open communication and receptiveness to input by encouraging active feedback; in doing so, they foster a prosocial culture where feedback is viewed as a developmental tool rather than as criticism, thereby enhancing moral standards and interpersonal trust (Wu, 2021). Prior studies highlight the pivotal role of leaders in fostering employee feedback (Song et al., 2023). EL positively impacts FSB, inspiring trust, and respect among employees, who emulate appropriate behaviour through social learning processes (Laudel & Narciss, 2023). Hence, EL promotes performance-enhancing behaviours like FSB through social learning mechanisms.

H1: Ethical Leadership positively affects Feedback-Seeking Behaviours.

## **Intrinsic motivation, ethical leadership, and feedback-seeking behaviours**

Drawing on the concept of EL, employees are more likely to experience supportive conditions that fulfil their basic psychological needs, thereby fostering the IM necessary for engaging in FSB (Li et al., 2023). Motivation refers to the internal psychological processes that drive individuals to pursue specific goals and fulfil essential needs. In this context, IM denotes the inner drive to engage in activities for their inherent

satisfaction and personal value, rather than due to external rewards or pressures (Lin, 2007). IM includes both affective and cognitive dimensions of commitment (Goldman et al., 2017), which positively influence employees' willingness to seek feedback.

Ethical leaders play a vital role in shaping this motivation by articulating a compelling organisational vision and helping employees understand the importance of the organisation's mission and their own roles within it (Sun et al., 2024). Moreover, by offering consistent support, respecting individual needs, and acknowledging employee competencies, ethical leaders foster an environment conducive to IM (Shafi et al., 2020). Employees with high levels of IM are thus more inclined to seek feedback proactively and demonstrate greater autonomy and engagement in their work (Shin & Grant, 2019).

H2: Intrinsic Motivation plays a mediating role in the effect of Ethical Leadership on Feedback-Seeking Behaviours.

### **Does the relationship between ethical leadership and feedback-seeking behaviours have a mediating role with intrinsic motivation and affective commitment**

The relationship between EL and FSB can be significantly shaped by the mediating roles of IM and AC. EL fosters integrity, open communication, and trust among employees (Islam et al., 2020; Lin et al., 2022; Saha & Sharma, 2020;). Such an environment not only enhances employees' IM – by making them feel valued and appreciated in their roles (Zhang, J. et al., 2023) – but also reinforces their AC, which is understood as an emotional attachment to the organisation (Chernyak-Hai et al., 2024; Mamun & Khan, 2020). Intrinsically motivated employees are more likely to engage in FSB, as they are driven by an internal desire for learning, improvement, and growth (Gan et al., 2023). Similarly, employees with strong AC tend to invest more effort in their tasks and are more committed to achieving organisational goals, which, in turn, encourages proactive feedback-seeking to enhance performance (Haffar et al., 2023).

Building on SDT, we propose that EL first nurtures IM by supporting employees' psychological needs for autonomy, competence, and relatedness. This enhanced motivation subsequently strengthens AC, forming a sequential mechanism that ultimately leads to increased engagement in FSB.

H3: Intrinsic Motivation and Affective Commitment serially mediate the relationship between Ethical Leadership and Feedback-Seeking Behaviours.

## METHOD

---

### Sample and procedure

The research sample consists of employees working at a plant that produces technological household goods. Research data were collected between April 2024 and May 2024 and there was no pre-registration. First of all, the factory manager was interviewed and informed about the purpose of the research. The research was allowed to be conducted on the condition that the research data would not be shared with third parties and that the name of the company would not be given. With the help of HR managers, participants in all departments were surveyed on-site. The participants, who were selected by the convenience sampling method, were first informed about the purpose of the research and the questionnaire was administered on a voluntary basis with the commitment that their confidentiality would be guaranteed.

When the obtained questionnaires were analysed, 11 questionnaires that were considered to be filled in randomly were not included in the study. Upon completion of the data collection process, a total of 433 surveys were obtained. These surveys were thoroughly examined by the researchers. In line with Byrne's (2016) recommendations, the surveys of 7 participants who failed to respond to more than 50% of the items on the latent variables, and the surveys of 5 participants who marked all items on the latent variables as either '1' or '5', were excluded from the study. Thus, a valid sample of 422 employees was retained.

Of the participants, 203 are female and 219 are male. 248 participants are married, while 174 are single. Regarding age distribution, 155 participants are 30 years old or younger, 132 are between the ages of 31 and 40, and 135 are 41 years old or older. In terms of education level, 106 participants have completed high school or lower, 286 have completed associate's or bachelor's degrees, and 30 participants have received graduate education.

### Statistical analysis

SPSS 27.0 and AMOS 22.0 software were used for data analysis. First, we analysed whether Common Method Bias (CMB) – a potential distortion that can occur when data for all variables are collected from the same source at the same time – was a concern for this study. Then, the validity and reliability of the scales used in the research were checked, and descriptive statistical analyses were performed. Correlation analysis was used to determine the relationships between the variables. In our study, we employed the Process Macro (Model 6) developed by Hayes (2018) to test the hypotheses. We employed

bootstrapping with 5,000 resamples, a non-parametric technique that repeatedly draws samples (with replacement) from the dataset to estimate the confidence intervals of indirect effects, thereby increasing the robustness and reliability of the mediation analysis.

## Measures

In this study, we used well-established scales from prior literature, all of which have demonstrated strong validity and reliability. All items were retained in the final analysis following reliability and validity checks. All scales are 5-point Likert-type and statements are rated from "1 = strongly disagree" to "5 = strongly agree". Demographic information such as gender, age, and marital status of the participants was categorised.

*Ethical Leadership.* The 10-item EL scale developed by Brown et al. (2005) was used to determine the participants' perceptions of their managers' ethical leadership. Sample statements of the scale are "The team leader conducts his/her personal life in an ethical manner" and "The team leader listens to what employees have to say".

*Intrinsic Motivation.* The IM scale developed by Ruiz-Palomino & Zoghbi-Manrique-de-Lara (2020) utilising the work of Gagné et al. (2010) was used to determine the IM of the participants. There are three items in the scale. Sample statements of the scale are "I have chosen this job because I enjoy it very much" and "I have chosen this job because I have fun doing it".

*Affective Commitment.* The six-item AC scale developed by Meyer et al. (1993) was used to determine the AC of the participants. Sample statements of the scale are "I feel strong sense of belonging to my organisation" and "I am proud to tell others I work at my organisation".

*Feedback-Seeking Behaviours.* The six-item FSB scale developed by Parker and Collins (2010) and frequently used in recent studies (Zhang, X., et al., 2023) was used. Sample statements of the scale are "I observe which performance behaviours my boss rewards and use this feedback" and "I seek feedback from my supervisor about potential advancement within the system".

## RESULTS

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### Common method bias

Collecting all data from a single source raises concerns regarding CMB (Podsakoff, 2012). To mitigate this risk, several procedural remedies were applied during the data collection process. First, professional guidance was sought during the development of the questionnaire, and the items were random-

ly ordered to reduce response patterns. Participants were assured of the confidentiality of their responses and were encouraged to answer sincerely. Furthermore, the survey was conducted in settings where the participants' supervisors were not present, minimising potential social desirability bias.

Despite these precautions, it is still recommended to statistically test for the presence of CMB. Accordingly, Harman's single-factor test was conducted by entering all measurement items into an exploratory factor analysis. The results showed that a single factor did not account for the majority of the variance – the largest variance explained by one factor was 36.2%, which is below the critical threshold of 50%. In addition, correlation analysis was performed. Bagozzi et al. (1991) suggest that if inter-variable correlations exceed 0.90, CMB may be present. However, all correlations in this study were well below that threshold (Table 1).

Lastly, the variance inflation factor (VIF) values among the latent constructs were examined to assess multicollinearity, following the recommendation by Kock (2015), who states that VIF values should be lower than 3.3. The results confirmed that all VIF values met this criterion. Taken together, these findings provide evidence that the dataset is free from significant CMB (Kock, 2015; Bagozzi et al., 1991).

## Reliability and validity analyses

Firstly, the reliability and validity of the variables were checked. For the reliability control Cronbach's alpha, Composite reliability (CR) and Omega coefficients were taken into consideration, while for the validity control, structural and convergent were taken into consideration. The findings obtained as a result of the analysis are presented in Table 1.

TABLE 1  
Reliability and validity

Variables	Factor loadings	Cronbach's alpha	CR	Omega	AVE
Ethical leadership	0.621-0.752	0.903	0.910	0.903	0.504
Intrinsic motivation	0.724-0.826	0.810	0.812	0.810	0.590
Affective commitment	0.562-0.865	0.859	0.860	0.860	0.513
Feedback-seeking behaviours	0.657-0.731	0.870	0.875	0.871	0.502

In order to check the reliability of the scales used in the research, internal consistency (Cronbach's alpha), CR values and Omega coefficients were taken into consideration. The findings presented in Table 1 show that Cronbach's alpha values are between 0.810 and 0.903, CR values are between 0.812 and 0.910 and Omega coefficients are between 0.810 and 0.903. The literature states that reliability can be mentioned when

these values are 0.7 and above (Sürücü et al., 2023; Hair et al., 2017). The findings in Table 1 confirm that the scales are internally consistent and reliable.

After the reliability of the scales was checked, validity tests were conducted. Fornell and Larcker (1981) state that convergent validity can be mentioned if the Average Variance Extracted (AVE) value is greater than 0.5 and AVE takes a value smaller than the combined reliability value (Sürücü & Maslakçı, 2020; Fornell & Larcker, 1981). In addition, the fact that the  $\sqrt{\text{AVE}}$  value is greater than the correlation values between the variables and the correlation value does not exceed 0.85 indicates that the scales have discriminant validity (Table 1). The results in Table 1 confirm that the AVE values vary between 0.502 and 0.590 and that the AVE is smaller than the combined reliability value, thus the scales have convergent validity. In addition, the fact that the  $\sqrt{\text{AVE}}$  value is greater than the correlation values between the variables and the correlation value does not exceed 0.85 indicates that the scales have discriminant validity (Table 2).

Lastly, the fit indices of the measurement model were checked and found to have good fit values ( $\chi^2/df = 2.96$ , GFI = 0.974, NFI = 0.971, CFI = 0.963, TLI = 0.957 RMSEA = 0.047) (Byrne, 2016). When all the findings obtained are evaluated together, it can be said that the scales used in the research are reliable and valid scales.

## Descriptive statistics analysis

Descriptive statistics and correlation analyses are presented in Table 2.

Variables	<i>M</i>	<i>SD</i>	1	2	3	4
Ethical leadership	3.59	0.62	(0.710)			
Intrinsic motivation	3.98	0.56	0.423	(0.768)		
Affective commitment	4.01	0.71	0.481	0.536	(0.716)	
Feedback-seeking behaviours	3.41	0.66	0.462	0.444	0.437	(0.709)

TABLE 2  
Descriptive statistics  
and correlations

\*\* $p < 0.05$ , Values shown in parentheses are  $\sqrt{\text{AVE}}$

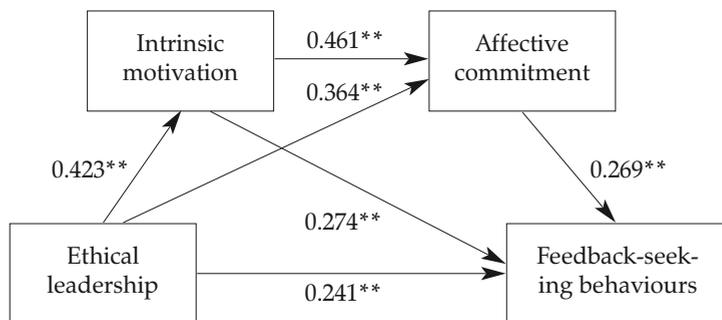
Correlation analysis reveals that EL has a positive relationship with IM ( $r = 0.423, p < 0.05$ ), AC ( $r = 0.481, p < 0.05$ ) and FSB ( $r = 0.462, p < 0.05$ ). In addition, the relationship between IM and AC ( $r = 0.536, p < 0.05$ ) and FSB ( $r = 0.444, p < 0.05$ ) is also positive. Following the establishment of these significant relationships among the variables, hypothesis testing was subsequently performed.

## Hypothesis testing

Process Macro (version 4.0), developed by Hayes (2018) as an add-on to SPSS, was used to test the research hypotheses. Process is a regression-based path analysis tool used for testing complex models involving mediation, moderation, or both. In this study, we used Model 6, which is designed to examine a serial multiple mediation structure. Specifically, it estimates the indirect effect of an independent variable (EL) on a dependent variable (FSB) through two mediators in a defined causal sequence ("IM → AC").

The analyses were conducted with 5,000 bootstrap resamples and a 95% confidence interval. Bootstrapping is a resampling procedure in which multiple subsamples of the same size as the original sample are randomly drawn to empirically examine the variability of parameter estimates and fit indices (Byrne, 2010). Hayes (2018) suggests that 5,000 resamples are sufficient to ensure reliable results. The analysis results are presented in Figure 1 and Table 3.

FIGURE 1  
Serial multiple  
mediation model and  
standardised model  
paths



Estimate	Paths	$\beta$	SE	95% CI	
				LLCI	ULCI
Direct effect	EL → FSB	0.241	0.089	0.107	0.169
Indirect effect	EL → IM → FSB	0.091	0.084	0.082	0.099
	EL → AC → FSB	0.067	0.052	0.052	0.083
	EL → IM → AC → FSB	0.048	0.044	0.025	0.062
Total effect	EL → FSB	0.447	0.193	0.134	0.254

TABLE 3  
Total, direct, and in-  
direct effects of each  
model path

EL: Ethical Leadership; FSB: Feedback-Seeking Behaviour; IM: Intrinsic Motivation; AC: Affective Commitment

Analyses conducted to test the serial mediation effect showed that the direct effect of EL on FSB ( $\beta = 0.241, p < 0.05, [CI = (0.107, 0.169)]$ ) was significant and positive (Figure 1). Thus, Hypothesis 1 was supported.

The findings presented in Table 3 show that IM mediates the effect of EL on FSB ( $\beta = 0.091, p < 0.05, 95\% CI [0.082,$

0.099]). Thus, Hypothesis 2 is supported. The findings in Table 3 also confirm that IM and AC are serial mediators in the effect of EL on FSB ( $\beta = 0.048, p < 0.05, 95\% \text{ CI } [0.025; 0.062]$ ). Thus, Hypothesis 3 is supported.

These findings provide strong empirical support for the proposed theoretical model grounded in SDT. Specifically, the results confirm that EL not only has a direct positive effect on employees' FSB but also exerts a significant indirect effect through IM and AC. The mediation results – particularly the serial path from "EL  $\rightarrow$  IM  $\rightarrow$  AC  $\rightarrow$  FSB" – highlight the psychological mechanisms through which ethical leadership shapes proactive employee behaviours.

This sequential mediation indicates that ethical leaders cultivate a work environment that satisfies employees' psychological needs for autonomy, competence, and relatedness, which in turn fosters a stronger emotional connection to the organisation and encourages employees to seek feedback as part of their developmental trajectory. These results not only validate the hypothesised model but also contribute to the literature by empirically demonstrating the dynamic and multi-layered process through which leadership styles influence employee learning behaviours.

Overall, the findings emphasise the strategic importance of EL in building motivational climates that support continuous improvement, open communication, and employee-driven performance enhancement.

The data supporting the findings of this study are available upon request.

## DISCUSSION

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This paper focused on examining the serial mediating role of IM and AC in explaining how ethical leaders promote employees' FSB. The study provides empirical evidence to address the research gap concerning the psychological mechanisms through which ethical leadership fosters proactive feedback-seeking – an area that has remained underexplored in leadership research.

The findings indicate statistically significant associations showing that EL is positively related to IM and AC, both of which are, in turn, associated with greater FSB among employees. In support of the first hypothesis, the results demonstrate that EL enhances employees' motivation to seek feedback. This study builds upon prior research that has established links between EL and various employee outcomes, including commitment (González-Cánovas et al., 2024; Dimitriou, 2022), retention (Junaidi, 2023; Mayende & Musenze, 2018), well-being (Halbusi et al., 2024; Sarwar et al., 2020), and job satisfaction (Valentine et al., 2024; Freire & Bettencourt, 2020), thereby offering deeper insight into the broader effects

of EL. Ethical leaders cultivate an environment of open communication and set clear standards that support continuous learning and improvement, encouraging employees to seek feedback without fear of negative consequences (Bakar & Connaughton, 2022).

Our findings align with those of Yulianeu et al. (2024), who found that destructive leadership – via leader psychopathy – erodes ethical norms and psychological resources, leading to expediency through moral disengagement and organisational cynicism. In contrast, our study highlights the positive pathway whereby EL satisfies psychological needs and reinforces motivational and emotional bonds, thereby fostering constructive behaviours such as FSB. Collectively, these studies illustrate the dual impact of leadership on employee behaviour: it can either provoke defensive, deviant responses or nurture proactive engagement.

Additionally, research by Arzenšek et al. (2021) on labour market precarity shows that atypical contracts and intensified workloads reduce employee well-being and suppress voice. Our findings offer a counterpoint by suggesting that EL may act as a buffer against such adverse conditions by cultivating psychologically safe environments in which employees feel both intrinsically motivated and emotionally committed to their organisations. Similarly, Arasli et al. (2020) demonstrated that constructive leadership fosters innovation through psychological safety and employee creativity. Our study extends this line of inquiry by examining how EL facilitates FSB via IM and AC, further underscoring the developmental potential of supportive leadership.

Recent work by Jeong et al. (2025) also complements our findings by showing that EL elicits other-praising moral emotions, which encourage prosocial behaviours such as feedback seeking, organisational citizenship, and voice. These affective mechanisms add to the understanding that EL operates not only through motivational and relational pathways but also through emotionally grounded moral appraisals.

Finally, Kumar and Vilvanathan (2024) show that even negative organisational stimuli – such as supervisor gossip – can prompt employees to engage in feedback seeking to protect or improve their performance and reputation. Their study emphasises the mediating role of FSB and reveals that personal traits like agreeableness moderate this dynamic. Taken together with our focus on EL, these findings suggest that both positive and negative social cues can act as meaningful drivers of developmental workplace behaviours such as feedback seeking.

Next, the study investigated the mediating role of IM, an area that remains relatively underexplored despite its signifi-

cant influence on employee performance (Patwary et al., 2024; Triswanto & Yunita, 2021). The results revealed that IM positively influences FSB; motivated employees are more likely to pursue opportunities for development and growth (Hurtienne & Hurtienne, 2023; Martin, 2018). These findings suggest that EL enhances FSB primarily through its impact on IM, which serves as a crucial psychological mechanism in this relationship. In turn, this process fosters greater employee gratitude and engagement within the organisation.

Furthermore, the study contributes to the ongoing discourse by examining a relatively neglected yet essential area; the dual mediating roles of IM and AC in the relationship between EL and FSB. IM has been identified as a key driver of employee satisfaction and engagement (Ma et al., 2023), whereas AC refers to the emotional attachment employees feel toward their organisation (Mamun & Khan, 2020). This emotional connection encourages employees to invest in continuous improvement, growth, and development. The findings show that the sequential mediation of these two variables enriches the feedback-seeking process. Employees who are both satisfied and emotionally supported demonstrate a greater tendency to seek feedback proactively – unlike those who lack such motivation and commitment.

In sum, this study not only builds upon previous research but also deepens our understanding of how EL influences employee behaviour. It emphasises the central role of IM and AC in cultivating a healthy organisational climate that supports FSB.

Although the findings support the hypothesised mediation pathway, the cross-sectional nature of the data prevents us from making strong causal claims. It is possible that FSB also influences perceptions of leadership or AC. Future longitudinal or experimental studies are needed to more robustly establish the temporal ordering and causal direction among these variables.

## CONCLUSION

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Addressing a notable gap in the literature, this study explored the serial mediating roles of IM and AC to explain how EL fosters employees' FSB. It offers empirical evidence to better understand the mechanisms that motivate employees to actively seek feedback. Overall, the findings provide a valuable perspective on the potential outcomes of FSB within organisations.

This research contributes novel insights by demonstrating how feedback-seeking, when combined with AC and IM – both grounded in SDT – reflects employees' psychological needs for relatedness and competence, ultimately enhancing

performance outcomes. Such an environment reinforces the importance of feedback-seeking as a developmental behaviour that drives both individual improvement and broader organisational success (Cheng et al., 2023). Furthermore, examining how and why EL shapes FSB within a large manufacturing context offers meaningful theoretical contributions and practical implications for leadership development and organisational strategy (Cheng et al., 2023).

## Theoretical and practical implications

This study makes several contributions to the literature by empirically linking ethical leadership to employees' proactive FSB. While a few studies have tested similar models (Ajmal et al., 2024; Gong et al., 2019), these have largely overlooked the manufacturing plant context. Prior research has often utilised motivation-related variables to explain this relationship; however, the current study uniquely positions IM as a central mechanism through which ethical leaders facilitate employees' engagement in FSB. In addition, the study emphasises AC as a second serial mediator – a variable that remains underexplored in the feedback-seeking literature.

Theoretically, this research extends the existing model by incorporating SDT, which posits that individuals are inherently motivated when their needs for competence, relatedness, and autonomy are fulfilled (Schrock et al., 2023). Ethical leaders help satisfy these psychological needs, thereby enhancing both IM and AC, which in turn foster FSB. The findings underscore the essential role of leader-provided feedback within a motivational framework, aligning closely with the core tenets of SDT. In doing so, this study offers a comprehensive understanding of the mechanisms by which EL positively shapes FSB through serially mediated pathways.

From a practical standpoint, the findings offer actionable insights for manufacturing organisations. First, the study reinforces the value of encouraging FSB as a means of meeting employees' basic psychological needs and improving their work efficacy. It further highlights the importance of recognising IM and AC as key drivers of this behaviour. Given that employees may hesitate to engage in feedback-seeking due to fear or uncertainty, fostering a work climate that nurtures internal motivation and AC to the organisation is essential.

To this end, HR departments and organisational leaders should implement training and development programmes that clearly communicate the organisational mission, values, and performance expectations. Such initiatives can promote goal alignment and cultivate a sense of purpose. Moreover, organisations should prioritise employee well-being and psychological safety, creating an environment that supports personal

initiative and open communication. These strategies collectively enhance the conditions under which FSB can thrive, thereby contributing to both individual growth and organisational effectiveness.

## **Limitations and future directions**

Despite yielding valuable insights, this study has several limitations. First, the sample – drawn exclusively from a manufacturing plant in Manisa, Türkiye – may lack the diversity necessary to reflect broader organisational contexts, thereby limiting the generalisability of the findings. Future research should aim to include more varied samples across different industries, regions, and cultural settings to enhance external validity and provide a more robust understanding of the observed relationships.

Secondly, while the cross-sectional nature of the study may not fully capture the dynamics and lasting effects of feedback, a longitudinal study could provide a deeper understanding of how these relationships develop over time and allow for causal inferences to be drawn. Such designs would allow for more nuanced insights into causal directionality and the developmental trajectories of these relationships. Moreover, the present model does not account for contextual and organisational factors – such as organisational culture, technological infrastructure, or external environmental conditions – that may significantly influence FSB. Including these variables in future models could help to clarify the broader conditions under which EL operates most effectively.

Another limitation lies in the potential influence of unmeasured variables outside the current model – such as individual personality traits, organisational climate, or self-selection biases – which could simultaneously affect employees' perceptions of EL and their likelihood to seek feedback. Future studies should incorporate relevant control variables or explore alternative model specifications to assess the robustness of the observed relationships.

It is also important to note that the relationships identified in this study are correlational rather than causal. While the proposed model is theoretically grounded in SDT and supported by prior empirical work, the use of cross-sectional data limits the ability to draw firm conclusions about causality. The mediation effects presented here should therefore be interpreted as suggestive pathways rather than definitive causal mechanisms. Future research employing longitudinal or experimental designs is necessary to validate the temporal sequencing and causal influence of the proposed mediators.

Lastly, future studies should broaden the theoretical framework by examining other potential mediators and modera-

tors – such as organisational justice, psychological empowerment, or different types of feedback (e.g., positive vs. negative). Investigating the role of diverse leadership styles across various sectors would also offer a more comprehensive understanding of the antecedents and outcomes of FSB in organisational settings. It should not be overlooked that variables such as self-selection and self-efficacy may also influence these results, aside from the specification of our model. Including these variables in future studies would help to clarify the relationship between ethical leadership and FSB.

## Informed consent

The consent of participants was obtained through consent form via online. The consent form contains the title of study, intent of study, procedure to participate, confidentiality, voluntary participation of respondents, questions/query and consent of the respondents. The respondents were requested to provide their willingness to participate in survey on consent form via email before filling the online-surveyed (questionnaire). Furthermore, participants were also assured that their anonymity would be maintained and that no personal information or identifying element would be disclosed. The consent form is in the supplementary files.

## Ethical approval statement

The data were collated through online survey approach (questionnaire), where anonymity of the respondents was meticulously observed. The respondents were not asked to provide their names, identification, address, or any other identifying elements. The authors minutely observed the ethical guidelines of the Declaration of Helsinki during the survey. In addition, we hereby certify that this study was conducted under the ethical approval guidelines of the Office of Research Innovation and Commercialisation, University of the Punjab granted under the office order No. D/ 409/ORIC dated 31-12-2021.

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# Kako etički vođe potiču ponašanje zaposlenika usmjereno na traženje povratnih informacija? Model serijalne medijacije

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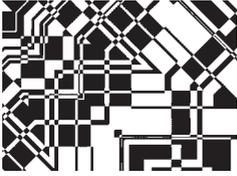
Ova studija istražuje kako etičko vodstvo potiče ponašanje zaposlenika usmjereno na traženje povratnih informacija. Oslanjajući se na teoriju samoodređenja, istraživanje identificira intrinzičnu motivaciju i afektivnu predanost kao ključne posrednike kojima etički vođe potiču proaktivno traženje povratnih informacija. Nalazi otkrivaju da etičko vodstvo pozitivno utječe na intrinzičnu motivaciju zaposlenika i afektivnu predanost organizaciji, pojačavajući njihovu sklonost traženju povratnih informacija, što je bitno ponašanje u dinamičnim i na kvalitetu osjetljivim radnim okruženjima, kakva je proizvodnja. Kako bi se empirijski ispitao ovaj model, provedeno je presječno istraživanje među 422 zaposlenika u velikom proizvodnom pogonu u Manisi u Turskoj. Rezultati podržavaju model serijalnoga posredovanja, potvrđujući da etičko vodstvo neizravno potiče ponašanje kojim se traže povratne informacije kroz povećanu intrinzičnu motivaciju i afektivnu predanost.

Ključne riječi: etičko vodstvo, intrinzična motivacija, afektivna predanost, ponašanje kojim se traže povratne informacije



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# MORE FEEDBACK, LESS DISSATISFACTION? EXPLORING THE IMPACT OF DATING APP FEEDBACK ON BODY DISSATISFACTION

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Existing research on mobile dating apps has focused on exploring the impact of dating apps on body dissatisfaction, but has largely overlooked which specific experiences of dating app use impact this dissatisfaction. As such, the underlying mechanisms at play require further exploration. Drawing upon social comparison theory and using a sample of 538 dating app users, this study constructed a model with the aim of clarifying the impact of dating app feedback on body dissatisfaction, the mediating role of self-conscious appearance comparison, and the moderating role of gender. The results indicated a negative association between dating app feedback and self-conscious appearance comparison, which in turn was positively associated with body dissatisfaction; however, gender did not moderate either of these associations. These findings provide recommendations which could enhance the dating app user experience.

Keywords: dating app feedback, self-conscious appearance comparison, body dissatisfaction, gender heterogeneity



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## INTRODUCTION

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Over the past decade, dating apps have rapidly transitioned from niche products to mainstream social platforms, redefining how individuals meet, form relationships, and evaluate potential partners (Sobieraj & Humphreys, 2022). Dating apps, as a specific type of social media, offer quick, image-focused user interactions leveraging smartphone functionality and location-based services (Yeo & Fung, 2018), which profoundly shape how physical appearance is appraised and how users form initial impressions of one another. By 2025, Tinder had over 75 million monthly active users worldwide (Kumar, 2025), while in China, Momo reported 3.5 million paying users and Tantan approximately 10.2 million monthly active users (PRNewswire, 2025), reflecting the widespread adoption of these platforms. However, as dating platforms continue to evolve, their emphasis on appearance-driven interactions and algorithmic matching has raised concerns regarding body image and self-perception. Many dating apps rely on algorithmic matching, whereby recommendation algorithms draw on users' location, profile characteristics, and visually driven cues, such as profile photos and presentation styles, to curate and rank potential partners, thereby shaping who users see and how they evaluate their own attractiveness (Binder et al., 2024; Hu & Wang, 2024). Given that profile photos and visual aesthetics play a central role in user engagement, it is crucial to examine the psychological effects of these platforms – particularly how they contribute to body dissatisfaction and self-conscious appearance comparison (SCAC).

Due to their rapid expansion, dating apps have drawn scholarly attention for a range of negative outcomes, such as deception (e.g., Hu et al., 2019; Markowitz & Hancock, 2018), privacy risks (Farnden et al., 2015), and risky sexual behaviour (Choi et al., 2016). However, one especially pressing concern is the potential for heightened body dissatisfaction, a construct linked to negative self-evaluation and unhealthy behaviours (Barnes et al., 2020; Leal et al., 2020). Given that dating apps typically prioritise visual self-presentation – through profile photos and appearance-driven swiping – this medium may intensify users' preoccupation with physical attractiveness (Portingale et al., 2022). Despite a growing number of studies, much of the existing research has primarily examined overall dating app usage (e.g., Strübel & Petrie, 2022), rather than investigating the role of user-generated feedback (e.g., likes, matches, and messages) in shaping body dissatisfaction. Feedback is a key mechanism for users to assess their desirability and social standing, making it crucial to understand its psychological effects. Nevertheless, research has yet to fully explore how different types of feedback influence body dissatisfaction. In-

deed, previous studies emphasise the need to differentiate specific dating app experiences that may drive these psychological effects (e.g., Thomas et al., 2024).

Within this visual-driven media context, one critical yet underexplored factor is user-generated appearance feedback. Such feedback can intensify self-assessment and social comparison, even if direct comparisons with other users are less explicit than on image-centric platforms like Instagram (Liu et al., 2022; Schuster et al., 2013). Of particular relevance here is SCAC, which involves individuals' acute awareness of potential judgements about their looks and heightened sensitivity to appearance-related cues (Schaefer & Thompson, 2014). While SCAC has been discussed in broader social media contexts, its role in dating apps has received far less attention, despite these platforms' heavy reliance on physical attractiveness as a first point of evaluation.

In the Chinese cultural context, strong appearance norms, impression-management pressures, and a highly visual digital environment heighten sensitivity to appearance-related cues and feedback. Moreover, the competitive nature of the contemporary Chinese marriage market, characterised by pressure to present an idealised self, increases users' reliance on dating app feedback as indicators of attractiveness and self-worth (Gao et al., 2024; Gao et al., 2022; Wang et al., 2025). These cultural dynamics make China a particularly relevant setting for examining how dating app feedback shapes SCAC and body dissatisfaction.

In light of these gaps, the present study draws on social comparison theory to propose a conceptual model where dating app feedback exerts an influence on body dissatisfaction through SCAC. We further consider whether gender moderates this feedback-to-dissatisfaction linkage. By using a cross-sectional survey of active dating app users, we aim to highlight the specific psychological pathway – from feedback to SCAC to body dissatisfaction – thereby illuminating how social interactions in visual-driven dating apps can shape body image perceptions. In this sense, this study refines our understanding of how dating apps contribute to body dissatisfaction and extends social comparison theory by exploring its role in the appearance-driven media context.

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

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### **Body dissatisfaction on dating apps**

Body image is a multidimensional concept encompassing one's body-related self-perception and self-attitudes, including thoughts, beliefs, feelings, and behaviours (Cash, 2004). Body dissatisfaction is one particular aspect of body image,

referring to one's negative thoughts and feelings about their body (Grogan, 2021).

The impact of media on body dissatisfaction is a prominent area of body dissatisfaction research. Social media, referring to internet-based channels that allow users to interact with others in various forms (Carr & Hayes, 2015), has become increasingly prevalent and popular, drawing growing attention to its influence on body dissatisfaction. Social media exerts tremendous pressure on individuals, compelling them to adhere to unrealistic body image standards. This pressure significantly contributes to widespread body dissatisfaction among users, and has been observed in both established social media platforms such as Facebook and Instagram (Hwnag, 2019), as well as newer tools like dating apps (Strubel & Petrie, 2017).

Scholars have examined the differences in body dissatisfaction between users and non-users of dating apps, as well as variations in body dissatisfaction based on app usage frequency. Some researchers have found that the use of dating apps may lead to increased body dissatisfaction (Strubel & Petrie, 2017; Strübel & Petrie, 2022), while others have argued that there is no association between dating apps and body dissatisfaction (Malz, 2020). These inconsistent findings may be due to their use of simplistic and broad measurement indicators, such as overall usage frequency, time spent on the app, or binary indicators of whether one uses dating apps. Given these inconsistent conclusions, further exploration is needed to understand the impacts of dating apps on body dissatisfaction.

## **Dating app feedback and body dissatisfaction**

Dating app users are able to assess their attractiveness to others by the number of successful matches they make (Hobbs et al., 2017; Portingale et al., 2022). In the context of dating app, feedback from others can contribute to a user's self-consciousness. For example, Her and Timmermans (2021) noted that feeling successful on Tinder, based on indicators such as achieving more matches, can function similarly to receiving positive feedback on other social media platforms. These matches on dating apps represent the feedback users receive from others, providing them with a means by which users can assess themselves and their desirability. Drawing on previously-used identification of Tinder outcomes in research (Timmermans et al., 2018), dating app feedback in this study encompasses the number of users' successful matches, chat interactions, offline meetings, and friends made.

Evidence suggests that there may be an association between dating app feedback and body dissatisfaction. Feedback from others in general is related to body dissatisfaction,

with previous studies indicating that appearance-related comments are linked to personal body dissatisfaction. Specifically, exposure to negative appearance-related comments was found to increase personal body dissatisfaction (Fuller-Tyszkiewicz et al., 2019; Liu et al., 2022; Schuster et al., 2013), while positive comments were shown to decrease it (Fuller-Tyszkiewicz et al., 2019; Liu et al., 2022; Schuster et al., 2013), though the extent of decrease might be comparatively minor (Fuller-Tyszkiewicz et al., 2019). Research in the context of social media has revealed that people experience a notable increase in body satisfaction when receiving positive feedback on their selfies (Wang et al., 2020). In summary, one's exposure to appearance-related feedback influences their attitude towards their own body.

The numbers of matches, chat partners, and established friendships gained through dating app use constitute the most direct and significant feedback users receive. The design of dating apps is typically centred on users' physical appearance (Portingale et al., 2022), emphasising the visual representation of profiles while downplaying textual descriptions, which makes physical appearance play a critical role not only throughout the matching process, but in the entire app usage experience. This technological environment may constitute an appearance-related pressure, leading users to be particularly concerned about their own physical appearance. Based on the feedback received while using dating apps, users can directly assess their own attractiveness in terms of appearance and physique (Portingale et al., 2022), and the quantitative feedback of dating apps not only directly reflects one's appearance and physical charm but also serves as a measure of it. The higher the number of interactions or responses received, the more positive feedback a user receives, which does not only boost their confidence but also reduces the dissatisfaction or anxiety they may feel about their own appearance. Thus, based on the abovementioned understandings, the following hypothesis was proposed:

Hypothesis 1 (H1): Dating app feedback is negatively associated with body dissatisfaction.

### **Self-conscious appearance comparison as a mediator**

*Dating app feedback and self-conscious appearance comparison.* Social comparison theory posits that individuals have an inherent drive to accurately evaluate and judge their own opinions and abilities (Festinger, 1954). When objective evaluations are unavailable, individuals tend to compare themselves to others. These comparisons enable individuals to gain a better understanding of their own capabilities, as well as limitations, by

allowing them to gauge their similarities or disparities against others (Hwnag, 2019). In essence, social comparison is a way by which individuals compare various attributes of themselves, such as abilities and viewpoints, to others to derive self-perception. Social comparison is a universally prevalent phenomenon that emerges from human interactions. There are three types of social comparison – upward comparison, downward comparison, and lateral comparison – and different types of social comparison have varying impacts on individuals (Alfasi, 2019; Hwnag, 2019). Within the realm of social media research, existing research has focused primarily on the effects stemming from upward social comparison (Schmuck et al., 2019).

Although dating app users may not facilitate social comparisons directly through likes or comments, as social networking sites allow (e.g., Facebook updates, WeChat moments; (Rosenthal-von der Pütten et al., 2019)), research suggests that they also engage in various forms of social comparison, including appearance comparisons (Strübel, 2023), upward comparisons (Thomas et al., 2023), and self-conscious social comparison (Her & Timmermans, 2021). Social comparison with potential partners is possible, particularly in terms of abilities and physical appearance, which are prevalent in romantic relationships (Pinkus et al., 2008). Frequent exposure to overly attractive potential partners may lead to competitive pressure and frustration, prompting individuals in the early stages of partner selection to make realistic assessments and seek partners whose physical attractiveness matches their own (Van Straaten et al., 2009). Research indicates that people typically form relationships with partners who are similar in aspects such as physical attractiveness, personality, and popularity, and this similarity contributes to positive relational outcomes (Shaw Taylor et al., 2011). In addition, dating app users may engage in self-conscious social comparisons (Her & Timmermans, 2021), which are primarily internal and based on the users' subjective perception. There is a perception among some dating app users that only the most attractive individuals achieve success (Hobbs et al., 2017), suggesting that social comparison on dating apps occurs even without explicit, identifiable opportunities for comparison. Given the focus of this study was on the impact of dating apps on body dissatisfaction, and considering the established link between appearance-focused social comparison and body dissatisfaction (Myers & Crowther, 2009), this study operationalised social comparison as SCAC.

Dating app feedback can be considered to be a way of deepening one's self-perception. As mentioned, the number of matches one makes on dating apps is a form of dating app

feedback, providing users with a quantifiable way to assess their own attractiveness (Hobbs et al., 2017). Research indicates that users may gauge their popularity and enhance their self-perception of attractiveness by evaluating the number of matches they receive (Hobbs et al., 2017; Strübel, 2023). Dating app feedback can also be a way for users to self-evaluate, particularly in terms of how they perceive their appearance and physical attractiveness. Researchers have found that positive feedback on social media is positively associated with self-esteem (Wang et al., 2020), which in turn is negatively correlated with social comparison orientation and media body comparison (Bergagna & Tartaglia, 2018). Therefore, there may be an association between dating app feedback and social comparison.

Dating app users judge their abilities and attractiveness based on the feedback they receive from others. By receiving an abundance of positive feedback, users may experience a stronger sense of their own worth and attractiveness, thereby reducing their need for social comparison. It is important to note that dating apps rarely provide explicit negative feedback. In this asymmetric feedback environment, the "opposite case" manifests not as direct rejection but as a lack of positive feedback, such as receiving few or no matches. Thus, while abundant positive feedback may diminish SCAC, lower levels of feedback may reinforce it. Therefore, we predicted that there would be a correlation between dating app feedback and users' social comparison.

Hypothesis 2 (H2): Dating app feedback is negatively associated with SCAC.

*Self-conscious appearance comparison and body dissatisfaction.* The relationship between social comparison and body dissatisfaction has been widely discussed. A meta-analysis on social comparison and body dissatisfaction revealed a highly significant correlation between them (Myers & Crowther, 2009), with appearance-centred social comparisons exacerbating individual body dissatisfaction.

Media has been identified as a primary source of body dissatisfaction among young people (Keery et al., 2004), and with the continuous development of social media, its specific impact on individuals' body dissatisfaction has garnered significant research attention. Studies show that social comparison significantly correlates with individual body dissatisfaction, both with regard to traditional mass media (Tiggemann et al., 2013) and on social networking sites (Pedalino & Camerini, 2022). Social comparison influences individuals' personal attitudes towards their own bodies, often resulting in a nega-

tive body image. Studies focusing on social comparison and body dissatisfaction in the context of dating apps, however, are comparatively limited. One study found that Tinder users, as opposed to Tinder non-users, showed a higher level of appearance comparison and a lower level of body satisfaction (Strübel & Petrie, 2022). Meanwhile, upward comparisons in dating apps have also been found to be associated with reduced happiness (Her & Timmermans, 2021).

Dating apps have been described as a contemporary medium for appearance pressures (Strubel & Petrie, 2017), creating a social environment that emphasises the importance of appearance. Consequently, dating app users typically focus more on the physical looks of others, leading to a preference for dating individuals who are considered to be more attractive, with more desirable physical attributes (Zhang et al., 2022). When dating app users engage in social comparison, they often compare themselves to those whom they consider to have a more desirable appearance and higher level of attractiveness, making it an upward comparison. According to social comparison theory, when dating app users find it difficult to meet the appearance standards of the targets of their comparisons, they may develop negative self-evaluations and dissatisfaction with their own bodies. Therefore, the following hypothesis was proposed:

Hypothesis 3 (H3): SCAC is positively associated with body dissatisfaction.

Together, H2 and H3 propose that dating app feedback has a significant effect on users' body dissatisfaction, which is mediated by SCAC. Despite being unable to know the success rate of others, dating app users may still consciously believe that others are more successful than they are (Her & Timmermans, 2021). Dating app users may compare themselves to others based on quantities (e.g., matchmaking success), and assume that individuals with a superior appearance also achieve greater matching success. This might increase users' sensitivity towards their own physical attributes, eventually leading to body dissatisfaction. Accordingly, we hypothesised the following:

Hypothesis 4 (H4): SCAC mediates the relationship between dating app feedback and body dissatisfaction.

*Gender heterogeneity.* Gender heterogeneity may impact the mediating effects of SCAC. According to the differential susceptibility to media effects model (DSMM), dispositional variables (e.g., gender, personality/temperament) can act as predictors of media use, as well as moderators of the effect of me-

dia use on media response states (Valkenburg & Peter, 2013). The impact of media use on media response states is influenced by these dispositional variables, which modify the direction and strength of the effect of media use on a given outcome, resulting in different media effects (Valkenburg & Peter, 2013). Individuals tend to seek out content that aligns with their habitual preferences, and this tendency is influenced by individual characteristics such as gender. Therefore, people tend to differ in their focus when using media, and these individual differences further contribute to the varied expressions of the effects produced by media use.

Accordingly, different genders may exhibit distinct responses to dating app feedback, leading to gender differences in the impact of dating app feedback on SCAC. Women tend to be socialised so that their self-construal is particularly based on social acceptance (Thomas et al., 2024), and are typically more responsive to feedback from others, while men tend to be less affected by external feedback (Cross & Madson, 1997). This suggests that women may exhibit a stronger susceptibility to dating app feedback, while men may not exhibit such pronounced susceptibility. Therefore, gender differences in susceptibility may alter the direction or intensity of the effect of dating app feedback on SCAC, serving as a moderating factor. Thus, the following hypothesis was proposed:

Hypothesis 5a (H5a): Gender moderates the association between dating app feedback and SCAC.

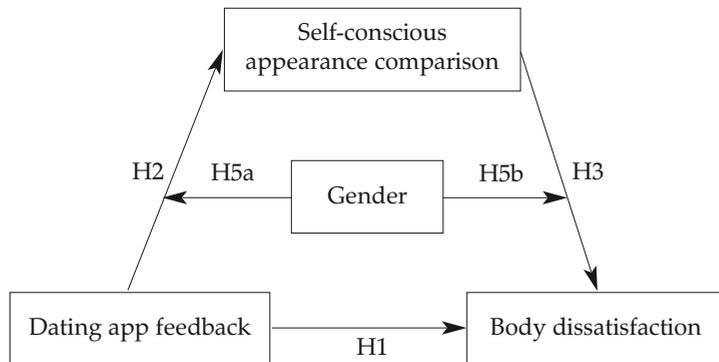
Sociocultural norms and expectations are significant factors causing differences in self-image attitudes between genders. The tripartite influence model states that individuals' body images are largely shaped by the internalisation of opinions about gender attributes and behaviours from family, peers, and media (Keery et al., 2004; Neagu, 2015). As men and women go through increasingly diverse psychological experiences throughout their developmental process, differences in their body-related self-identity emerge (Neagu, 2015). Traditional gender roles associate femininity with physical attractiveness, and masculinity with power and control; beauty standards promote a thin body ideal for women, while male body norms tend to be more flexible and lenient. Influenced by cultural standards, bodies of different genders are assigned distinct roles and expectations in society, and these gendered social norms contribute to gender differences in people's attitudes towards their own body image, leading to heightened female attention to appearance, both cognitively and behaviourally (Muth & Cash, 1997).

Existing research indicates that females typically exhibit higher levels of body dissatisfaction compared to males (Xu et

al., 2010). They generally place greater importance on their physical appearance (Quittkat et al., 2019), often describing their appearance more negatively and engaging in more upward comparisons (Franzoi et al., 2012), thereby experiencing greater pressure related to their appearance. Furthermore, studies have found that gender moderates the relationship between social comparison and body dissatisfaction (Ho et al., 2016; Myers & Crowther, 2009). Due to the substantial pressure on females to attain an ideal thin body shape and the fact that the societal evaluations of women are more appearance-focused, the connection between social comparison and body dissatisfaction is more pronounced among women (Myers & Crowther, 2009). Considering these potential gender differences, we put forward the following hypothesis:

Hypothesis 5b (H5b): Gender moderates the association between SCAC and body dissatisfaction. (See Figure 1)

FIGURE 1  
The hypotheses model



## METHOD

### Sampling procedure and data collection

Data for this study was gathered via a Chinese online survey platform (<https://www.wjx.cn/>). Dating app users such as Momo, Tantan, Tinder, and others were invited to complete a survey.<sup>1</sup> A total of 538 participants (48.5% male,  $M_{age} = 30.7$ ) took part in this study. Most participants held a bachelor's degree or higher (87.2%), 62.3% resided in non-first-tier cities,<sup>2</sup> 51.7% were currently in a relationship, and 95.9% were heterosexual.

### Measures

*Dating app feedback.* Referring to the Tinder Outcomes Scale (Timmermans et al., 2018), this study measured dating app feedback using specific software-related parameters considering the number of successful matches, the number of chat interactions, the number of offline meetings, and the number of friends

made. Participants were instructed to report the cumulative number of these experiences since they first began using dating apps. Four items measured these individually, and each item was rated using a nine-point scale with options ranging from 1 (0 matches) to 9 (more than 100 matches). The answers to these four questions were summed and averaged to derive the dating app feedback variable score, with a higher value indicating more positive feedback. Cronbach's alpha for this scale in this study was 0.842.

*Self-conscious appearance comparison (SCAC).* Considering the higher relevance of body dissatisfaction to personal appearance, this study combined the Self-Conscious Social Comparison Scale (Her & Timmermans, 2021) with the Appearance Comparison Scale (Schaefer & Thompson, 2014) to create the five items SCAC Scale for measuring users' social comparison on dating apps. Items were rated using a seven-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). The third question in the scale was reverse coded, and all answers were averaged to obtain the SCAC variable score. A higher value indicated a higher engagement in SCAC. Cronbach's alpha for this scale in this study was 0.701.

*Body dissatisfaction.* The Body Satisfaction Scale (Slade et al., 1990) was employed to measure participants' level of body dissatisfaction. This measure consists of 16 items, each referencing one body part (i.e., head, face, chin, teeth, nose, mouth, eyes, ears, shoulders, neck, chest, stomach, arms, hands, legs, and feet). Respondents are instructed to consider their own body and rate their satisfaction with each of the 16 body parts using a seven-point scale ranging from 1 (very dissatisfied) to 7 (very satisfied). All answers were reverse-coded and averaged to derive the body dissatisfaction variable score, with a higher score indicating a higher level of body dissatisfaction. Cronbach's alpha for this scale in this study was 0.867.

*Control variables.* Control variables were as follows: age, education (0 = below bachelor's degree, 1 = bachelor's degree or higher), region (0 = non-first-tier city, 1 = first-tier city), relationship status (0 = not in a relationship, 1 = in a relationship), and sexual orientation (0 = non-heterosexual, 1 = heterosexual).

## Analysis

Data analysis was conducted using statistical software SPSS 26.0 and PROCESS v4.2 to validate the hypotheses of this study. The mediation analysis was performed using PROCESS macro Model 4 with 5,000 bootstrap resamples, and the moderated mediation analysis using PROCESS macro Model 58 with 5,000 bootstrap resamples.

## RESULTS

### Descriptive statistics and correlation analysis

The descriptive statistics and correlation analysis results for key variables showed that dating app feedback was significantly negatively correlated with SCAC and body dissatisfaction. In addition, SCAC was positively associated with body dissatisfaction; while compared with females, males reported lower levels of SCAC and body dissatisfaction. As indicated in Table 1, all correlations are statistically significant, although their magnitudes are relatively small. To further explore gender patterns, we compared the mean levels of the key constructs. Males reported higher dating app feedback ( $M = 3.43$ ) than females ( $M = 2.87$ ). Females reported higher SCAC ( $M = 4.10$ ) than males ( $M = 3.90$ ) and slightly higher body dissatisfaction ( $M = 3.33$ ) than males ( $M = 3.07$ ).

### Mediation analysis

Dating app feedback significantly and negatively predicted SCAC ( $b = -0.111, p < 0.01, 95\% \text{ CI} = [-0.177, -0.044]$ ), indicating that individuals who receive more dating app feedback tend to engage in less SCAC. Additionally, dating app feedback significantly and negatively predicted body dissatisfaction ( $b = -0.057, p < 0.05, 95\% \text{ CI} = [-0.112, -0.002]$ ), suggesting that individuals who receive more positive feedback on dating apps experience lower levels of body dissatisfaction. However, when both dating app feedback and SCAC jointly predicted body dissatisfaction, only SCAC emerged as a significant predictor ( $b = 0.195, p < 0.001, 95\% \text{ CI} = [0.127, 0.263]$ ). This finding suggests that individuals engaging in more SCAC tend to have higher levels of body dissatisfaction. In the mediation model, the direct effect was non-significant, with an indirect effect of  $-0.022$  and a 95% bootstrapped CI of  $[-0.039, -0.007]$ , representing 38.6% of the total effect. H1, H2, H3, and H4 were supported.

TABLE 1  
Descriptive statistics and correlations for study variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1 Dating app feedback	3.146	1.273	1								
2 SCAC	4.007	0.978	-0.157**	1							
3 Body dissatisfaction	3.201	0.827	-0.145**	0.249**	1						
4 Age	30.700	5.844	0.028	-0.054	-0.092*	1					
5 Gender	-	-	0.225**	-0.097*	-0.164**	0.048	1				
6 Education	-	-	0.073	-0.063	-0.057	-0.170**	-0.039	1			
7 Region	-	-	0.059	-0.025	-0.146**	0.034	0.035	0.115**	1		
8 Relationship status	-	-	0.089*	0.064	-0.154**	0.081	-0.029	0.063	-0.007	1	
9 Sexual orientation	-	-	0.009	-0.014	0.022	0.034	0.050	0.005	0.006	0.026	1

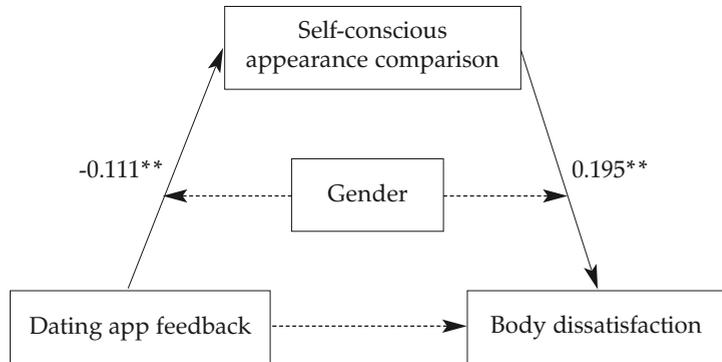
Notes:  $N = 538$ . *SD* = standard deviation. SCAC = Self-conscious appearance comparison. Female = 0, Male = 1. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

## Moderated mediation analysis

The moderated mediation analysis results showed that gender did not play a moderating role in the relationship between dating app feedback and SCAC, but it did moderate the effect of SCAC on body dissatisfaction ( $b = -0.146, p < 0.05, 95\% \text{ CI} = [-0.281, -0.011]$ ). Further exploration was done using simple slope tests. For females, a high level of SCAC was shown to lead to more body dissatisfaction (females:  $b = -0.036, 95\% \text{ CI} = [-0.071, -0.005]$ ; males:  $b = -0.013, 95\% \text{ CI} = [-0.031, -0.0005]$ ), however, slope difference test was not significant ( $\Delta b = -0.023, 95\% \text{ CI} = [-0.060, 0.014]$ ).

The moderated mediation index for gender was non-significant. In summary, SCAC mediates the relationship between dating app feedback and body dissatisfaction, while gender does not moderate this relationship. H5a and H5b were not supported (See Figure 2).

FIGURE 2  
Model of the moderated mediation effect



## DISCUSSION

This study explored the relationship between dating apps and users' body dissatisfaction, with particular attention to dating app feedback and self-conscious appearance comparison (SCAC). This study found that higher levels of dating app feedback were associated with lower body dissatisfaction. Although dating app feedback was not directly associated with users' body dissatisfaction, it was negatively related to SCAC. The results showed that gender did not moderate the mediation path, while descriptive analyses revealed meaningful gender differences in mean levels of the key constructs. Males tended to report higher dating app feedback, whereas females showed higher SCAC and higher body dissatisfaction. These patterns suggest that females may experience greater appearance-related self-consciousness, even though the structural relations among variables were similar across genders. Our findings contribute to a clearer and more nuanced understanding of

how dating apps shape users' perceptions of their physical attractiveness, thereby offering new perspectives on their relationship with body dissatisfaction.

Moreover, interpreting these findings through the lens of Chinese context further enriches our understanding. Chinese society places strong emphasis on physical attractiveness, social approval, and impression management, which may heighten sensitivity to appearance-related cues and amplify the psychological weight of dating app feedback. This cultural backdrop helps explain why feedback is linked to SCAC and body dissatisfaction among Chinese users. Additionally, the absence of gender differences may reflect shifting gender norms in contemporary Chinese digital culture, where both males and females increasingly experience comparable pressures to curate their online appearance and seek validation through digital interactions. These cultural considerations underscore the importance of examining dating app experiences within their sociocultural context.

## Theoretical contributions

Firstly, this study provides a theoretically meaningful refinement to existing dating app literature by demonstrating that it is not simply the use of dating apps, but the feedback generated within these platforms, that shapes users' psychological experiences. Prior studies have reported inconsistent findings, either suggesting increased body dissatisfaction (Strübel & Petrie, 2022) or no significant association (Malz, 2020). By adopting a more nuanced conceptualisation of dating app interaction, captured through quantitative feedback, the results reveal that higher levels of dating app feedback are associated with lower levels of body dissatisfaction. This insight advances research by clarifying the specific link between the use and body image.

Secondly, this study establishes self-conscious appearance comparison (SCAC) as a meaningful mediating mechanism linking dating app feedback to body dissatisfaction. Although users may have limited opportunities for direct appearance comparison within dating apps, our findings are consistent with prior work (Ho et al., 2016; Myers & Crowther, 2009) and show that social comparison processes remain salient in these environments. Drawing from prior research (Her & Timmermans, 2021; Schaefer & Thompson, 2014), this study conceptualises SCAC as a self-conscious and anticipatory form of appearance comparison, advancing an innovative construct that broadens the theoretical scope of social comparison theory in the context of dating app research.

Importantly, the results demonstrate that higher levels of dating app feedback are associated with lower levels of SCAC,

which in turn are associated with higher levels of body dissatisfaction. This pattern aligns with the view that positive feedback within dating apps may act as a cue of physical attractiveness and strengthen users' self-perception (Alexopoulos et al., 2020). Thus, SCAC operates as a grounded mechanism that explains how platform-specific feedback shapes users' self-evaluations, offering a more nuanced application of social comparison theory in mobile media contexts.

Thirdly, this study identifies an important boundary condition in theorising gender dynamics in dating app contexts. Contrary to common expectations that females would show stronger appearance-related responses, our findings indicate that gender does not moderate the mediation model. Drawing on the gender similarities hypothesis (Hyde, 2005) and goal congruity theory (Diekmann et al., 2020), this pattern suggests that males and females may behave similarly when guided by shared motivations. For example, the pursuit of self-worth validation does not differ by gender (Sumter et al., 2017). Rather than indicating the absence of gender effects, this null result highlights a meaningful boundary condition, implying that appearance-related processes on dating apps may operate similarly across genders when the motivational goals converge.

## Practical implications

This study also offers several practical implications for the design and governance of dating apps. Firstly, the finding that higher levels of dating app feedback are associated with lower SCAC and body dissatisfaction highlights the importance of effective feedback design. Positive and constructive forms of feedback, such as matches, messages, or other interpersonal affirmations, may serve as cues of attractiveness and help users develop more favourable perceptions of their physical appearance. Platforms seeking to cultivate healthier user experiences may therefore benefit from integrating feedback mechanisms that emphasise affirmation rather than competition.

Secondly, our findings suggest that dating app designers should consider strategies that limit opportunities for upward appearance comparison. These strategies may include reducing exposure to highly curated, filtered, or algorithmically amplified profiles that set unrealistic appearance standards. By decreasing cues that trigger SCAC, platforms can help mitigate appearance anxiety and support users' psychological well-being during app use.

Thirdly, given the increasing social relevance of mobile media and the broader concerns surrounding appearance anxiety and body image, this study underscores the need to foster healthier online interaction environments. Platforms may incorporate well-being-oriented design practices, such as prompts

that encourage positive body image, reminders that appearance is only one facet of personal worth, or features that highlight diverse attributes beyond physical looks. Such approaches may contribute to a more supportive digital ecosystem and help reduce the negative psychological consequences associated with appearance-focused media environments.

## Limitations and future directions

Despite its contributions to the literature, the study does also exhibit several limitations. First, due to using a cross-sectional survey, all paths identified in this study are correlational rather than causal and the present design does not allow us to determine causal directionality between dating app feedback, SCAC, and body dissatisfaction. Future research should employ longitudinal or experimental designs to more rigorously test causal paths and temporal ordering among these variables.

Second, in terms of variable measurement, our study focused on the number of matches, chats, offline meetings, and social connections formed during dating app use as indicators of feedback received by users. Future research should explore more nuanced characteristics or aspects of feedback, such as level of feedback during interactions. Moreover, the mediation pattern may be influenced by unmeasured third variables. For instance, users' baseline physical attractiveness or other dispositional characteristics (e.g., self-esteem, appearance orientation, social anxiety) could simultaneously relate to receiving more feedback, engaging in less SCAC, and reporting lower body dissatisfaction. Future research should assess whether the mediational sequence holds when such variables are controlled.

Third, our mediation model was based on social comparison theory, and examined the mediating effects of social comparison. However, given the complex internal mechanisms that exist between dating apps and body dissatisfaction, subsequent studies should consider variables such as self-esteem or self-objectification, which may also play mediating roles. Further research should contrast social comparison between same-sex versus opposite-sex patterns among dating app users. In addition, qualitative exploration of body image among dating app users could inform more novel theoretical frameworks. Fourth, our research focused on Chinese dating app users within the context of Chinese culture. The distinct differences between Chinese and Western cultural backgrounds, particularly in terms of body focus, may limit the generalisability of our findings. Additionally, the majority of participants

in this study identified as heterosexual, with only a small proportion reporting non-heterosexual orientations. As users of different sexual orientations may vary in terms of their concerns regarding body image, future studies should aim to diversify the participant pool and extend these findings to a broader audience for better representativeness.

## **CONCLUSION**

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Mobile dating apps are increasingly popular, influencing users' online social lives. This study went beyond measuring frequency of dating app use, examining instead how dating app feedback is associated with users' body dissatisfaction through self-conscious appearance comparison (SCAC). The findings show that higher levels of dating app feedback are associated with lower SCAC and lower body dissatisfaction, whereas lower levels of feedback are associated with heightened SCAC and greater body dissatisfaction. These results reflect a bidirectional pattern inherent in correlational relationships: some users may experience dating apps as validating and confidence-enhancing when receiving more positive feedback, while others, particularly those receiving little feedback, may experience increased appearance-related concerns. By highlighting these correlational associations, this study provides a more balanced and nuanced understanding of how dating apps relate to body image. Rather than portraying dating apps as uniformly beneficial or harmful, our findings suggest that their psychological implications depend on users' feedback patterns.

### **Ethics approval and consent to participate**

All procedures for the study were in accordance with the ethical standards of the institutional review board of the School of Journalism and Communication at Tsinghua University, and the ethical review approval number is: No. TSJC 202301310011.

### **Availability of data and materials**

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

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## NOTES

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- \* The first two authors (Tony Fengfang and Bin Li) contributed equally to this work and should be considered as co-first authors.
- <sup>1</sup> The data used for the present study was collected in the context of a larger study examining dating app use among Chinese adults. More information regarding data collection and the other study can be obtained by contacting the author.
- <sup>2</sup> First-tier cities refer to economically developed cities in China, specifically Beijing, Shanghai, Guangzhou, and Shenzhen in this article.

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## Više povratnih informacija, manje nezadovoljstva? Istraživanje utjecaja povratnih informacija na aplikacijama za upoznavanje na nezadovoljstvo tijekom

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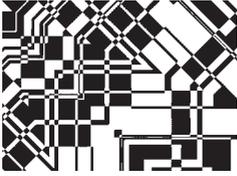
Sadašnja istraživanja usredotočila su se na istraživanje utjecaja aplikacija za upoznavanje na nezadovoljstvo tijekom, ali su uglavnom previdjela koja specifična iskustva upotrebe aplikacija za upoznavanje utječu na to nezadovoljstvo. Stoga temeljni mehanizmi koji djeluju u tom kontekstu zahtijevaju daljnje istraživanje. Oslanjajući se na teoriju socijalne usporedbe i uzorak od 538 korisnika aplikacija za upoznavanje, ova je studija konstruirala moderirani model medijacije s ciljem razjašnjenja utjecaja povratnih informacija na aplikacijama za upoznavanje na nezadovoljstvo tijekom, zatim posredničke uloge samosvjesne usporedbe izgleda te moderirajuće uloge spola. Rezultati su pokazali negativnu povezanost između povratnih informacija na aplikacijama za upoznavanje i samosvjesne usporedbe izgleda, koja je pak bila pozitivno povezana s nezadovoljstvom tijekom; spol, međutim, nije moderirao ni jednu od ovih povezanosti. Ovi nalazi pružaju preporuke koje bi mogle poboljšati korisničko iskustvo aplikacija za upoznavanje.

Ključne riječi: povratne informacije na aplikacijama za upoznavanje, samosvjesna usporedba izgleda, nezadovoljstvo tijekom, heterogenost spolova



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# OVEREDUCATION AND EARNINGS IN CROATIA: EVIDENCE FROM PIAAC

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The aim of this paper is to identify the incidence of overeducation, its determinants, and its impact on workers' wages in Croatia. The analysis was conducted on a sample of respondents from Croatia using data from the 2022 and 2023 PIAAC survey. Overeducation was measured subjectively by comparing respondents' level of formal education with the level of education they themselves considered necessary for their work. A total of 30.3% of respondents stated that their work did not fully utilise their educational qualifications. To analyse the determinants of overeducation, the Heckman selection model was used to correct for possible bias in the sample due to the inclusion of only employed respondents. Area of education, experience, and business ownership were found to be statistically significant determinants of overeducation. The impact of overeducation on wages was assessed using a regression model, which found that overeducated employees earn statistically significantly less than colleagues with similar educational qualifications who perform jobs corresponding to their level of education.

Keywords: overeducation, earnings, Heckman selection model, Croatia



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## INTRODUCTION

The concept of overeducation, introduced by Freeman (1976), refers to a labour market disruption that occurs when an employee has more formal education than their job requires and the job does not fully utilise the knowledge and skills gained through education (Capsada-Munsech, 2017; Freeman, 1976).

Markussen et al. (2024) note that both educational attainment and labour market skill requirements have increased over time, but the rise in educational attainment has outpaced the increase in labour market requirements, leading to growing overeducation in the labour market. Measuring this phenomenon typically involves determining whether a person has more education than their current job demands. This can be assessed objectively, by comparing the individual's education level with official job requirements, or subjectively, through the individual's self-assessment.

In this study, overeducation is measured using a self-assessment approach, comparing individuals' attained level of education with the level they report as required for their current job. This choice is primarily determined by the structure of the PIAAC data and is consistent with a substantial body of international literature using similar measures (Belfield, 2000; Chevalier, 2003; McGuinness, 2006; McGuinness et al., 2018; Capsada-Munsech, 2019). However, the main limitation of this method is its susceptibility to bias from individual expectations, job satisfaction, and socially desirable responses, which can lead to overestimating the level of overeducation. While subjective indicators may reflect perceived skill underutilisation rather than strictly formal educational mismatch, they provide valuable insights into workers' own assessment of job – education fit and have been shown to capture economically meaningful differences in labour market outcomes.

The phenomenon of overeducation can be interpreted through several theoretical perspectives, each offering different empirical predictions. Human capital and career mobility theories view overeducation as a temporary mismatch that decreases with experience, whereas signalling and job competition theories predict a more persistent mismatch and a wage penalty associated with excess education. These perspectives motivate empirical analysis of the determinants of overeducation. Career mobility theory suggests that the probability of overeducation declines with work experience, while job competition and signalling models indicate that highly educated individuals and workers in less regulated segments of the labour market are more likely to experience persistent mismatch.

The most extensively studied consequence of overeducation in the labour market is its impact on workers' wages (Bauer, 2002). When comparing the wages of employees with the same level of education, where one is overeducated for their job, the evidence generally indicates that overeducation negatively affects earnings (Quintini, 2011; Groot & van den Brink, 2000). Overeducation results in significant wage losses for individuals and imposes costs on overall economic productivity, which may increase further if the trend towards higher education participation continues without a corresponding rise in suit-

able jobs (McGuinness, 2006). However, Plesca and Summerfield (2023) note that the economy can still benefit from higher education, even if this is not immediately apparent, showing that productivity increases by approximately 3% for every 1% rise in the proportion of overeducation. Regarding earnings, human capital theory predicts positive returns to education even in the presence of mismatch, whereas signalling and job competition theories suggest that excess education results in a wage penalty compared to equally educated but well-matched workers. These predictions are tested by estimating a wage equation that explicitly accounts for overeducation.

The educational structure in Croatia has improved considerably since the early 2000s, with the proportion of highly educated people rising to around 30 per cent (Matković, 2011). Following the Republic of Croatia's accession to the EU, emigration of young, well-educated individuals to member states offering better employment opportunities has increased. Overeducation can motivate migration, especially among the highly educated, who seek better opportunities for professional development, higher earnings, and greater social advancement of their skills (Czaika & de Haas, 2017). Barrett and Duffy (2008) show that overeducation in the home country acts as a "push" factor for migration. This makes Croatia a particularly interesting case for analysing educational mismatch and its labour market consequences.

The aim of this paper is to empirically examine theoretical predictions using recent PIAAC data for Croatia, first by analysing the determinants of overeducation while accounting for selection into employment, and then by assessing whether overeducation is associated with a wage penalty among employed workers. The research question arising is: what are the determinants of overeducation in Croatia, which elements are important in determining overeducation, and is overeducation associated with a wage penalty? To guide the empirical analysis and to more clearly link the theoretical framework with the econometric results, the following hypotheses are formulated:

- H1: Overeducation is associated with individual characteristics and is more likely among women, younger individuals, and those with higher levels of education.
- H2: Overeducation is related to job and firm characteristics and is less likely in the public sector, in smaller firms, and in full-time employment, where job requirements tend to be more clearly defined.
- H3: Overeducated workers earn lower wages than equally educated workers whose jobs match their qualifications.

The paper adopts an integrated approach, analysing the prevalence of overeducation, its determinants, and its effects on wages. Its contribution is the application of the selection model to the analysis of overeducation determinants, accounting for employment selection, and the use of subjective, indirect measures of educational mismatch consistent with the structure of PIAAC data and existing literature. Finally, the paper provides new evidence on the effect of overeducation on wages in Croatia, showing that workers with excess education earn less than equally educated workers whose jobs match their qualifications.

The paper is organised as follows. The next part sets out the theoretical framework, followed by a review of previous research. The fourth part of the paper describes the research methodology, and the fifth part presents the results of the statistical analysis and their discussion. The paper ends with concluding remarks.

## **THEORETICAL FRAMEWORK**

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In the context of human capital theory (Schultz, 1961; Becker, 1975), the level of education is positively related to worker productivity. Within this framework, overeducation may occur when individuals initially accept jobs below their formal education level to gain work experience and firm-specific skills. Career mobility theory predicts that overeducation is a temporary phenomenon that decreases as workers gain experience and move to better-matched positions (Sicherman & Galor, 1990). According to signalling theory (Spence, 1973), education primarily signals individuals' abilities rather than directly determining productivity. When information is imperfect, employers use educational credentials to rank job applicants, which may prompt individuals to pursue higher levels of education to enhance their labour market prospects. Consequently, workers may acquire excess education without securing jobs that fully utilise their qualifications, resulting in persistent overeducation and lower wages compared to equally educated but well-matched workers.

From the perspective of job competition theory (Thurow, 1975), overeducation occurs when the supply of highly educated workers exceeds the number of high-skill jobs, forcing individuals to accept positions with lower educational requirements. As wages are determined by job characteristics rather than individual qualifications, excess education is not rewarded, resulting in persistent mismatch and a wage penalty. Job assignment theory (Sattinger, 1993) combines human capital and job competition models. It assumes that good jobs are limited and that wages depend partly on the job and partly on

workers' human capital. Overeducation arises because wages are determined by both individual education and job characteristics, not by only one of these factors. Assignment and job-matching approaches conceptualise overeducation as an equilibrium outcome resulting from imperfect matching between workers' educational attainment and job requirements (Sattinger, 1993; Hartog, 2000). In such contexts, wage outcomes depend not only on individual characteristics but also on the educational requirements of the job, providing a direct theoretical rationale for analysing educational mismatch and its wage effects.

In summary, human capital theory sees such a disruption as a short-term adjustment in the labour market, whereas theories such as signalling (Rodrigues & Guest, 2024; Spence, 1973) or job competition (Isopahkala-Bouret et al., 2021; Thurow, 1975) consider this phenomenon a long-term problem. Previous studies suggest that overeducation may be associated with lower job satisfaction, higher rates of shirking, absenteeism, and increased turnover, which may have broader implications for labour market efficiency (Pan et al., 2025; Bedemariam & Ramos, 2021; Peiro et al., 2010; Battu et al., 2000; Büchel, 2002; Quinn & Baldi de Mandilovitch, 1975).

These theoretical predictions directly motivate the empirical strategy adopted in the paper, which first analyses the determinants of overeducation while accounting for selection into employment, and subsequently examines the wage effects of educational mismatch.

## LITERATURE REVIEW

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The rapid expansion of tertiary education has changed the composition of labour market entrants, while the structure of available jobs has not necessarily adjusted at the same pace (Markussen et al., 2024). This has led to educational mismatch and overeducation. Consequently, much research has focused on the measurement, determinants, and consequences of overeducation. McGuinness et al. (2018) found that overeducation increased or remained unchanged in almost all EU countries between 2001 and 2011, a trend also confirmed in Poland for 2006–2014 (Baran, 2024).

The literature distinguishes between objective and subjective approaches to measuring overeducation (Belfield, 2000). Cross-country evidence confirms substantial variation in the incidence of overeducation depending on the measurement strategy, with subjective methods often producing higher estimates (Capsada-Munsech, 2024; Capsada-Munsech, 2019; McGuinness et al., 2018; Verhaest & Omeij, 2006; Chevalier, 2003). Objective indicators suggest relatively moderate rates in several European countries, such as Denmark (11%; Nielsen, 2011)

and Belgium (24%; Karakaya et al., 2007), while subjective measures often indicate a considerably higher prevalence, reaching around 40–50% in countries such as the United Kingdom, France, Japan, Italy and Poland (Dolton & Siles, 2003; Di Pietro & Urwin, 2006; Johnes, 2019; Palczyńska, 2021).

As expected, people with higher levels of education are at greater risk of being overeducated, as confirmed by Cultrera et al. (2025), who found that between 20% and 33% of PhD holders in Europe are overeducated. Empirical studies consistently identify age and labour market experience as key factors, with younger and less experienced workers more likely to accept jobs below their educational level (Bečić, 2014; Baran, 2024). This pattern is often interpreted as evidence of career mobility, where workers initially accept mismatched positions to gain experience and later move into better-matched jobs (McGuinness, 2006). Gender differences have also been widely documented, with women showing a higher probability of overeducation than men (Charalambidou & McIntosh, 2021), especially among those with young children (Baran, 2024), suggesting that family-related constraints may limit access to well-matched jobs. Büchel and van Ham (2003) were among the first to highlight the importance of accounting for labour market entry processes by using the Heckman selection model, showing that family background significantly affects employment probabilities and, indirectly, the risk of overeducation. Similarly, Nieto and Ramos (2017) apply Heckman's correction to distinguish between formal qualifications and actual skills, demonstrating the relevance of unobserved individual heterogeneity in shaping overeducation outcomes across institutional contexts.

Different approaches yield similar results when analysing the impact of overeducation on workers' wages. Mandrone et al. (2022) studied the Italian labour market and found that overeducation significantly lowers wages, while Cultrera et al. (2025) also note that overeducated doctoral graduates face a considerable wage penalty (between 15% and almost 30%) compared to their well-matched colleagues. Dolton and Vignoles (2000) estimate that the penalty in the form of lower wages for overqualified workers is between 4% and 17%. Battu et al. (1999) estimated the average decline in returns six years after graduation to be between 11% and 17%. Caroleo and Pastore (2018) use the Heckman framework to obtain more accurate estimates of the wage effects of overeducation, arguing that neglecting selection leads to biased penalty estimates.

Empirical evidence for Croatia is largely outdated and limited, especially regarding nationally representative microdata and integrated analyses that simultaneously examine the incidence, determinants, and earnings consequences of overeducation. Bečić (2014) reports persistent overeducation in

Croatia based on Labour Force Survey data from 1998 to 2010. Matković (2011) highlights the difficult transition of young graduates into the labour market, suggesting structural and institutional barriers to securing well-matched employment. A study by Obadić and Oršolić (2012), using a Zagreb sample, finds that approximately one-third of highly educated workers surveyed consider themselves overqualified, with mismatch in communicative and other skill domains being prevalent and linked to personal characteristics. This paper contributes to the literature by addressing these gaps using recent PIAAC data and an empirical strategy that jointly analyses selection into employment and the wage effects of educational mismatch.

## DATA AND METHODS

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The study is based on the data set of the Programme for the International Assessment of Adult Competencies (PIAAC), which was collected in 2022 and 2023. PIAAC provides a valuable collection of data on people's education, skills and work experience on a sample of at least 4500 respondents aged 16 to 65 in each country. The key advantage is the methodological standardisation of data collection and coding, which ensures variable consistency and a high level of comparability between Croatian data and data from other countries. The representativeness of the PIAAC sample is ensured through a multi-stage weighting procedure. Baseline weights, calculated as the reciprocal probability of selection, are adjusted by a non-response factor and calibrated to key population parameters (age, gender, education) to reduce bias. This methodological framework enables generalisation of results to the adult population while minimising the standard error of estimation. Statistical data processing was performed using the SPSS and Stata software packages.

To measure overeducation in this paper, indirect self-assessment is used. Subjective methods rely on the employee's self-assessment of how much they use their formal training in their work. Individuals may be asked directly whether they are overeducated for their job, known as direct self-assessment. Alternatively, employees may be asked for their opinion on the minimum level of education required for their job. In this paper, the assessed required level of education is compared with the employee's actual level of education to determine whether they are overeducated. Responses to the PIAAC questionnaire item "What level of formal education is required for your job?" were compared with responses to "What is the highest qualification you have obtained?". Overeducation is identified when the level of education attained is higher than that required for the job, and a dummy variable was created that takes the value 1 for overeducated individuals. Subjective

methods based on employees' self-assessment of whether they are overeducated are subject to various forms of bias. For example, individuals may overestimate or underestimate the educational requirements of their job due to social desirability or personal expectations, which can lead to misclassification (Capsada-Munsech, 2019).

The determinants of overeducation in the labour market include individual characteristics of employees (such as age, gender, and level of education), structural labour market conditions, and a mismatch between the supply of and demand for certain qualifications (Mrnjavac & Bečić, 2014). To investigate the determinants of overeducation in relation to socio-economic characteristics, the Heckman selection model was used. This model is applied in economics when analysing a phenomenon within only a subset of the population. For example, overeducation is examined among the employed rather than the unemployed, although the unemployed can also be considered overeducated, as they do not use the skills and knowledge acquired through education at all. In this context, the results may be biased because the employed are likely to differ from the non-employed. The Heckman model consists of two stages: in the first stage, the probability that someone is included in the sample (i.e., that they are employed) is modelled. The key component of the model is this selection equation, which must include at least one variable not included in the outcome equation. Following previous research (Büchel & van Ham, 2003; Caroleo & Pastore, 2018), the variables included in the selection equation are gender, age, educational attainment, and family background characteristics which can be crucial for the decision to accept a job, such as the presence of a spouse and children in the household.

$$\text{Prob}(\text{employ} = 1)_i = \gamma_0 + \gamma_1 \text{gender}_i + \gamma_2 \text{age}_i + \gamma_3 \text{education}_i + \gamma_4 \text{spouse}_i + \gamma_5 \text{children}_i + u_i$$

In the second stage, the main outcome is modelled, adjusting for selection bias. In this way, the Heckman model provides more accurate estimates, even if the sample is not fully representative. The equation is:

$$\text{Prob}(\text{OE} = 1)_i = \beta_0 + \beta_1 \text{gender}_i + \beta_2 \text{experience}_i + \beta_3 \text{area\_of\_study}_i + \beta_4 \text{public\_sector}_i + \beta_5 \text{firm\_size}_i + \beta_6 \text{job\_type}_i + \beta_7 \lambda_i + \varepsilon_i$$

The dependent variable is the probability of being overeducated in the workplace, while the independent variables are gender, experience, area of education, and workplace characteristics such as ownership, firm size and type of job. The variables included in the model are listed in Table 1.

Variable	Description	Values
OE	Overeducation – examinee having the level of education higher than required by job	0 not overeducated 1 overeducated
Age	Age of examinee	Age
Gender	Gender	0 Male 1 Female
Education	The highest level of education obtained by examinee	1 Low education 2 Medium education 3 High education
Area of study	Area in which examinee finished the highest level of education	1 Economics, business and administration 2 Law 3 Health 4 Welfare 5 Social and behavioural sciences 6 Journalism and information 7 Information and communication technologies 8 Natural sciences, mathematics, statistics 9 Engineering and manufacturing 10 Construction 11 Agriculture, forestry, fisheries and environmental studies 12 Personal and community services 13 Security and transport 14 Education and teacher training 15 Humanities, languages and arts
Work_experience	Work experience needed to get the current job	1 None 2 Less than a month 3 1 to 6 months 4 7 to 11 months 5 1 or 2 years 6 3 years or more
Public_sector	Sector in which examinee works	0 Other 1 Public sector
Firm_size	Number of people working for employer	1 Less than 50 employees 2 From 50 to 250 employees 3 More than 250 employees
Job_type	Type of the work arrangement	0 Full time 1 Part time
Employment	Examinee being employed	0 Not employed 1 Employed
Spouse	Living with spouse or partner	0 No 1 Yes
Children	Having children in the household	0 No 1 Yes

TABLE 1 Variables in the model

Source: PIAAC

The effects of overeducation on employees' wages are usually estimated using the model developed by Mincer (1974), which includes the number of years of education as an independent variable. However, in this paper, due to the nature of the data, a different modified equation is used, which includes a dummy variable for overeducation and shows only the presence of the mismatch and its impact on wages, but not the intensity implied by each year of overeducation. The selection equation of the Heckman model remains unchanged from the previous model, while the outcome equation is:

$$\ln \text{Earnings}_i = \alpha_0 + \alpha_1 \text{gender}_i + \alpha_2 \text{age}_i + \alpha_3 \text{higheducation}_i + \alpha_4 \text{manufacturing}_i + \alpha_5 \text{construction}_i + \alpha_6 \text{retail}_i + \alpha_7 \text{transport}_i + \alpha_8 \text{accommodation}_i + \alpha_9 \text{information}_i + \alpha_{10} \text{finance}_i + \alpha_{11} \text{small\_firm}_i + \alpha_{12} \text{OE}_i + \alpha_{13} \lambda_i + \varepsilon_i$$

The dependent variable is the natural logarithm of monthly earnings. The independent variables gender, age and OE are the same as in the previous model, while the other independent variables included are shown in Table 2.

TABLE 2  
Variables in the wage  
regression equation

Variable	Description	Values
High education	Dummy variable indicating that the individual has a high level of education	0 Other
		1 High education
Manufacturing	Dummy variable indicating that the individual is working in manufacturing	0 Other
		1 Manufacturing
Construction	Dummy variable indicating that the individual is working in the construction sector	0 Other
		1 Construction
Retail	Dummy variable indicating that the individual is working in the wholesale and retail sector	0 Other
		1 Retail
Transport	Dummy variable indicating that the individual is working in transportation and storage	0 Other
		1 Transportation and storage
Accommodation	Dummy variable indicating that the individual is working in accommodation and food service activities	0 Other
		1 Accommodation and food service activities
Information	Dummy variable indicating that the individual is working in information and communication	0 Other
		1 Information and communication
Finance	Dummy variable indicating that the individual is working in financial and insurance activities	0 Other
		1 Financial and insurance activities
Small_firm	Dummy variable indicating that the individual is working in a firm with less than 50 employees	0 Other
		1 Less than 50 employees

The coefficient next to the overeducation dummy variable is usually negative, indicating that overeducation lowers wages. This negative coefficient can be explained by the fact that employees are compared with others who have the same level of education but are appropriately matched in the labour market. Cohn and Kahn (1995) point out that the negative sign of the dummy variable for overeducation does not mean that each year of overeducation brings a negative return, but only that the return is lower than for people with the same education who are adequately employed in the labour market.

## RESULTS AND DISCUSSION

The incidence of overeducation measured subjectively in the Croatian sample is shown in Figure 1.

➔ FIGURE 1  
Overeducation  
in Croatia

	Not overeducated (%)	Overeducated (%)
Total population	69.7	30.3
Female	69.0	31.0
Male	70.4	29.6

The previous figure shows that 30.3% of examinees reports that their work does not fully utilise the skills and knowledge they have acquired through education. This finding is like that of Palczyńska (2021) for Poland, who also used self-assessment of educational match. As previous studies suggest, the level of overeducation in Croatia is higher than that found using objective measures, which was around 10% (Bečić, 2014). However, it appears that Croatians feel less overeducated than the inhabitants of the G7 countries, as Johnes (2019) found overeducation rates of around 50% in the UK, Japan, France, and the USA, 42.5% in Germany, and 34% in Italy. The second part of the figure shows that the proportion of women among the overeducated is higher than that of men, which is consistent with previous findings in other countries (Baran, 2024). This is partly attributed to the greater burden of family commitments, with women more likely to choose jobs offering greater flexibility, even if these are below their qualifications. Table 3 provides results of the probit analysis of overeducation determinants in Croatia. The analyses were performed using the main weighting variable (SPFWT0) and 80 replication weights (SPFWT1–SPFWT80) with the Balanced Repeated Replication method with Fay's coefficient of 0.5, using the Stata svy procedure.

TABLE 3  
Heckman selection  
model results

Dependent variable – OE	Coef.	Std. err.	t	Sig.
Probit model with sample selection				
Number of observations			3378	
Population size			1.911.699	
F(26, 3344)			5.38	
Prob > F			0.000	
Gender	0.010	0.081	0.13	0.898
Work experience (Reference category: No experience)				
Less than a month	0.467**	0.147	3.17	0.002
1 to 6 months	-0.268**	0.086	-3.10	0.002
7 to 11 months	-0.360**	0.127	-2.84	0.005
1 or 2 years	-0.664***	0.092	-7.25	0.000
3 years or more	-0.611***	0.116	-5.25	0.000
Area of study (reference category: Economics, business and administration)				
Law	-0.138	0.231	-0.60	0.551
Health	-0.239*	0.142	-1.67	0.094
Welfare	0.262	0.391	0.67	0.503
Social and behavioural sciences	0.106	0.249	0.43	0.670
Journalism and information	-0.086	0.363	-0.24	0.814
Information and communication technologies	-0.069	0.189	-0.37	0.713
Natural sciences, mathematics, statistics	-0.385*	0.203	-1.90	0.058
Engineering and manufacturing	-0.047	0.114	-0.41	0.682
Construction	-0.059	0.156	-0.38	0.707
Agriculture, forestry, fisheries and environmental studies	0.220	0.163	1.35	0.176
Personal and community services	-0.089	0.104	-0.85	0.393
Security and transport	-0.050	0.137	-0.36	0.716
Education and teacher training	-0.549***	0.186	-2.95	0.003
Humanities, languages and arts	0.065	0.232	0.28	0.781
Public_sector	-0.252***	0.077	-3.26	0.001
Firm size (reference category: less than 50 employees)				
From 50 to 250 employees	-0.050	0.085	-0.58	0.560
More than 250 employees	-0.214	0.115	-0.19	0.852
Job type (reference category: full time job)				
Part time	0.184	0.191	0.96	0.335
Const	-0.129	0.203	-0.64	0.524
Selection regression, dependent variable: employment				
Gender	-0.156***	0.055	-2.86	0.004
Age	-0.024***	0.003	-8.64	0.000
Education (ref. category: Low)				
Medium	2.248***	0.161	14.0	0.000
High	2.965***	0.167	17.73	0.000
Spouse	0.423***	0.086	4.92	0.000
Children	0.535***	0.088	6.09	0.000
Const	-1.391***	0.187	-7.45	0.000
Athrho	-0.552***	0.160	-3.46	0.001
Rho	-0.502	0.119		

Note: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p > 0.1$

The parameter  $\alpha$  is statistically significant at the 1% level, indicating that selection bias is pronounced and justifies the use of the Heckman model.

The table above shows that age, gender, educational level, living with a spouse or partner, and having children are all statistically significant for the likelihood of employment, which is a prerequisite for being overeducated in the workplace. Living with a spouse or partner may provide additional logistical support, which can make employment easier or more difficult depending on the context. Having children also has an impact, as parents must often juggle work and family life, which can limit employment opportunities. The level of education has a direct impact on employability, as higher education often leads to more and better-paid opportunities. The strong influence of education on employability, together with the observed incidence of mismatch, aligns with human capital and signalling theories, which suggest that individuals invest in higher education to improve their labour market position.

Some areas of education have a statistically significant impact on the probability of overeducation. This may be because some fields offer a clearer path to the labour market and more stable jobs, while others provide a broader but more uncertain range of opportunities. This highlights the importance of better linking the education system to the labour market and encouraging students to make informed choices.

It turned out that the public sector is less likely to generate subjective overeducation. The public sector has stricter regulations, clearly defining the pay scale and formalised recruitment procedures, which often specify the level of education required for the job. This reduces the risk of someone being hired "below their level of education". On the other hand, private companies often have more complex internal structures and different reasons for hiring highly qualified staff for positions that may not require their full expertise – be it for reasons of flexibility, reputation or because the tasks evolve quickly. In the private sector, the lack of education can be compensated for by other elements of human capital, but also, excess education most often represents a lack of experience, training or simply an employer's assessment that the individual has a low level of competence.

The lower likelihood of overeducation in the public sector and the variation across fields of study strongly support assignment and job-matching theories, which state that educational requirements and wages are largely determined by job characteristics, reducing mismatch where recruitment and job definitions are more formalised. The coefficients for the variable representing the work experience required to obtain a job are all statistically significant, and the negative sign for

the indicators for more experience means that the probability of overeducation decreases with experience, which goes in favour of mobility theories.

The results of the Heckprobit model provide partial empirical support for H1 and support for H2. Overeducation is associated with individual characteristics such as age and education level, confirming that certain groups are more exposed to mismatch in the labour market, but not with gender. At the same time, the lower likelihood of overeducation in the public sector, smaller firms, and more clearly structured employment arrangements supports the hypothesis that job and firm characteristics play an important role in shaping the incidence of overeducation.

As mentioned in the literature review, earnings are often associated with overeducation, i.e., such workers often earn less than those with the same level of education. The results of outcome regression of the earnings model with the OE dummy and considering other control factors such as gender, age and sector are shown in Table 4. The estimates were calculated considering the complex design of the PIAAC sample, using sample weights and BRR replication weights with Fay correction (Fay = 0.5). Standard errors are therefore adjusted for the stratified and clustered sample, allowing valid statistical inference at the population level.

TABLE 4  
Wage regression  
analysis

Dependent variable: natural logarithm of gross monthly earnings	Coef.	Std. err.	t	Sig.
Gender	-0.193	0.022	-8.86	0.000
Age	0.003	0.001	2.94	0.003
High_ed_dummy	0.333	0.028	12.05	0.000
OE	-0.120	0.021	-5.66	0.000
Manufacturing	0.017	0.032	0.54	0.590
Construction	0.077	0.038	2.02	0.044
Retail	0.015	0.035	0.42	0.677
Transportation	0.095	0.058	1.62	0.104
Accommodation	0.111	0.040	2.73	0.006
Information	0.204	0.103	1.98	0.048
Finance	0.117	0.092	1.27	0.205
Education	-0.116	0.034	-3.35	0.001
Part_time	-0.515	0.074	-6.99	0.000
Small_firm	-0.037	0.021	-1.75	0.081
Const	9.263	0.062	15.53	0.000
Athrho	-0.613	0.084	-7.28	0.000
Insigma	-1.053	0.039	-27.05	0.000
Rho	-0.546	0.059		
Sigma	0.349	0.014		
Lambda	-0.191	0.026		

Number of obs = 2896; Population size = 1.633.642; F(15, 2881) = 24.14; Prob > F = 0.000

Note: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p > 0.1$

The estimated parameters of the selection component of Heckman's model indicate the presence of selection bias in the sample of employed individuals. The parameter  $\rho$ , which measures the correlation between the errors of the selection and outcome equations, is negative and statistically significant, indicating a correlation between unobserved factors affecting both the probability of employment and the level of earnings. The statistically significant lambda parameter confirms the existence of selection bias and justifies the use of Heckman's selection model. The estimated value of the parameter  $\sigma$  reflects the dispersion of unobserved factors in the earnings equation, while the  $\theta$  parameter represents the transformed form of the correlation parameter  $\rho$  used in the estimation process.

The table above shows that certain personal characteristics are statistically significant in determining earnings, including gender, age, and higher education level. In addition, certain job-related characteristics are statistically significant for earnings, such as sector, type of job, and company size. As found in previous studies, the wages of women and younger workers are lower than those of their male and older counterparts, as indicated by the negative coefficients for gender and age. Since overeducation is central to the study and the results suggest that a high level of education has a positive effect on wages, the negative coefficient for overeducation reduces this effect and shows that overeducated workers earn less than equally educated individuals, which supports H3. However, experience can mitigate this, as greater age is associated with higher earnings. Part-time work is associated with significantly lower incomes. Compared to other sectors, wages are significantly higher in construction, accommodation and food, and the information sector, and lower in education.

## **CONCLUDING REMARKS**

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Growing belief in the benefits of education has led to a sharp increase in investment in education and a significant improvement in the educational structure of the population in recent decades, both globally and in the Republic of Croatia. As with investments in physical capital, many studies have sought to determine whether the return on investment in education justifies the expenditure. Since the mid-20th century, the return on investment in education has been estimated and shows that additional years of schooling increase wages or lifetime earnings in the labour market.

This paper examined the issue of overeducation in the Croatian labour market, focusing on its prevalence, causes, and impact on employee salaries. Overeducation is becoming in-

creasingly pronounced in Croatia, as in many other countries, because the educational level of the population is rising rapidly, while the structure of available jobs is not developing at the same pace. Based on data from the PIAAC survey from 2022 and 2023, and using a subjective method of measuring overeducation, it was found that 30.3% of respondents believe their workplace does not fully utilise the knowledge and skills they acquired through education. Analysis of the determinants of overeducation using the Heckman model revealed that gender, education level, field of education, sector, and company size play important roles. Women, especially those with higher education, are more likely to be overeducated. It was also found that employees in the public sector are less likely to be overeducated than those in the private sector. Regarding the impact of overeducation on wages, the results of the regression analysis confirm the hypothesis that overeducation affects wages. Overeducated employees earn statistically significantly less than their colleagues with similar educational qualifications who perform jobs corresponding to their level of education. This result is consistent with previous international research, which confirms that educational surplus can be partially utilised but does not bring the full economic benefit if it is not matched to the needs of the job. Findings show that overeducation in Croatia cannot be explained by a single mechanism but reflects the combined effects which goes in favour of assignment theory and career mobility dynamics.

Among the main limitations of the research, several aspects should be noted. Firstly, the use of a subjective method to measure overeducation introduces the risk of bias in respondents' perceptions, as individuals may apply different criteria when assessing the level of education required for their own job. Furthermore, the analysis was limited to those in employment, excluding the potentially large number of people who are out of the labour market due to overeducation. Finally, due to the nature of the available data, it was not possible to analyse in detail the dynamics of overeducation over time, such as how the position of overeducated workers changes throughout their careers.

Based on these results, several guidelines for future research can be proposed. Firstly, longitudinal monitoring of respondents' careers is recommended to determine the duration of overeducation and its impact on career development and lifetime earnings. It would also be useful to extend the analysis to the unemployed and workers in atypical employment (e.g. freelancers), which would provide a more complete picture of the consequences of overeducation. Furthermore, subjective and objective measurement methods should be combined and compared to minimise distortions and obtain more

robust indicators. Given the significant problem of emigration in Croatia, further research could examine how overeducation affects perceptions of opportunities and prospects in the home country.

The results presented here have important implications for policymakers. These include providing young people with better information when choosing their educational programmes, promoting enrolment in shortage occupations, and developing a system to predict future labour market needs. The lifelong learning system also requires further development to enable existing skills to be adapted to changes in the economy. The private sector could strengthen cooperation with educational institutions and develop internal career development strategies that allow optimal utilisation of employees' knowledge.

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## Preobrazovanost i plaće u Hrvatskoj: nalazi iz PIAAC-a

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Cilj je rada utvrditi razinu, odrednice i utjecaj prekomjernog obrazovanja na plaće radnika u Hrvatskoj. Analiza je provedena na uzorku ispitanika iz Hrvatske, koristeći se podacima iz istraživanja PIAAC-a, koje provodi OECD za 2022. i 2023. godinu. Prekomjerno obrazovanje mjerilo se subjektivnom metodom, uspoređujući razinu formalnog obrazovanja ispitanika s razinom obrazovanja koju sami smatraju potrebnom za obavljanje svoga posla. Analiza pokazuje da 30,3 % ispitanika smatra kako njihove obrazovne kvalifikacije nisu dovoljno iskorištene na njihovu radnom mjestu. Za

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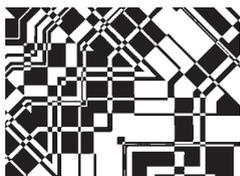
analizu odrednica prekomjernog obrazovanja iskorišten je Heckmanov selekcijski model, kako bi se uzela u obzir moguća pristranost uzorka zbog uključivanja samo zaposlenih ispitanika. Utvrđeno je da su područje obrazovanja, iskustvo te vlasništvo poduzeća statistički značajne odrednice prekomjerna obrazovanja. Utjecaj prekomjernog obrazovanja na plaće procijenjen je regresijskim modelom te je utvrđeno da prekomjerno obrazovani radnici imaju niže plaće u usporedbi s jednako obrazovanim radnicima na odgovarajućim pozicijama.

Ključne riječi: preobrazovanost, plaće, Heckmanov selekcijski model, Hrvatska



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# MANJINSKI STRES I MENTALNO ZDRAVLJE: ULOGA SAMOSUOSJEĆANJA

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Ovaj rad istražuje ulogu manjinskoga stresa i samosuosjećanja u mentalnom zdravlju LGBTQ+ osoba u hrvatskom društvu. Polazeći od teorije manjinskoga stresa, cilj istraživanja bio je ispitati može li se razlika u mentalnom zdravlju i dobrobiti između LGBTQ+ i cisrodnih heteroseksualnih osoba objasniti razinom izloženosti manjinskom stresu te u kojoj mjeri samosuosjećanje može ublažiti te efekte. Rezultati analize provedene na prigodnom uzorku sačinjenom od 358 sudionika (61% LGBTQ+) pokazali su da LGBTQ+ osobe doživljavaju više razine manjinskoga stresa, niže zadovoljstvo životom te češće simptome depresije u odnosu na cisrodne heteroseksualne osobe. Model serijalne medijacije pokazao je da manjinski stres potpuno posreduje odnos između seksualne orijentacije i mentalne dobrobiti, dok se samosuosjećanje pokazalo tek parcijalnim medijatorom odnosa manjinskoga stresa i mentalnoga zdravlja. Ovakvi nalazi potvrđuju važnost društvenoga konteksta u određivanju mentalnoga zdravlja utvrđenu u prijašnjim istraživanjima.

Ključne riječi: manjinski stres, LGBTQ+, seksualne manjine, mentalno zdravlje, dobrobit, samosuosjećanje



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## UVOD

Suvremeni stručnjaci na području tjelesnoga i mentalnoga zdravlja nerijetko se pozivaju na biopsihosocijalni model, prema kojem zdravlje nije samo odraz gena i individualnih karakteristika i odabira nego i društvenoga konteksta (v. Engel, 1981).

Primjerice, poznato je da društveni kontekst definira društvene uloge, iz kojih proizlaze razna očekivanja i obaveze. Nemogućnost primjerenog udovoljavanja tim očekivanjima i obavezama u temelju je stresa (Allison, 1998; Brown i Scheid, 2010; Pearlin i sur., 1981, 2005). Poznata je i povezanost karakteristika susjedstva i vjerojatnosti problema s mentalnim zdravljem (Stockdale i sur., 2007). Konačno, i istraživanja koja su nastojala utvrditi heritabilnost problema s mentalnim zdravljem pokazuju da nije sve do pojedinca i gena (Hettema i sur., 2001; Sullivan i sur., 2000). Stoga se, bez umanjivanja važnosti biološke i psihološke komponente, u ovom radu ipak usmjeravamo na istraživanje uloge (hrvatskoga) društva u definiranju mentalnoga zdravlja kroz prizmu manjinskoga stresa.

## Manjinski stres

U razumijevanju mentalnoga zdravlja LGBTQ+ osoba istaknutu ulogu ima teorija manjinskoga stresa (Meyer, 2003). Ona je osmišljena s ciljem objašnjavanja socijalnih, psiholoških i strukturalnih odrednica stigme zbog koje LGBTQ+ osobe ostvaruju niže rezultate na mjerama mentalnoga zdravlja i dobiti u odnosu na heteroseksualnu cisrodnu većinu. Pritom Meyer (2003) razlikuje dva tipa izvora manjinskoga stresa: distalne procese vezane uz politiku, institucije i razne životne događaje te proksimalne stresore vezane uz socijalizaciju tijekom koje manjine prihvaćaju stigmatu i razvijaju mehanizme prikrivanja stigmatizirajućih obilježja i ponašanja. Dugoročnost i potencijalna postojanost svih navedenih stresora stoje u pozadini njihova odnosa s mentalnim zdravljem. Drugim riječima, manjinski stresori nisu izazovi s kojima se prosječna osoba nosi u svakodnevnom životu (King i sur., 2008) niti postoje čvrsti empirijski argumenti u prilog pripisivanju njihovih posljedica genetici (Frost i Meyer, 2023). Nastanak manjinskoga stresa može se razumjeti i iz perspektiva socijalne i evolucijske psihologije (Fishbein, 2003; Fiske, 2000).

Uloga manjinskoga stresa u mentalnom zdravlju empirijski je podržana. Metaanaliza provedena na unutargrupnim istraživanjima koja su uključivala mlade iz LGB populacije pokazala je da osobe izložene snažnijem manjinskom stresu ujedno doživljavaju više problema s mentalnim zdravljem (Dürbaum i Sattler, 2019). U hrvatskom kontekstu nedavno veliko istraživanje Blažev i suradnika (2025b) provedeno na LGBTQ+ osobama također je pokazalo da osobe izložene većim razinama manjinskoga stresa ujedno iskazuju više problema s mentalnim zdravljem te nižu dobit. S druge strane, Sattler i suradnici (2017) na uzorku iz Njemačke pokazali su da razlike u općoj procjeni mentalnoga zdravlja između cisrodnih hetero-

seksualnih i LGB osoba nestaju kad se u obzir uzme stres zbog manjinskog identiteta (mjereno kao iskustvo viktimizacije, osjetljivost na odbijanje i internaliziranu negativnost). U švedskom kontekstu, Bränströmova (2017) analiza podataka više od 10 000 sudionika iz štokholmske kohorte mentalnoga zdravlja pokazala je da uključivanje već i grube mjere društvene podrške prepolovljuje snagu odnosa seksualne orijentacije i traženja tretmana za poremećaje vezane uz mentalno zdravlje, pri čemu se iskustvo viktimizacije i prijetnji pokazalo manje relevantnim. Ovi rezultati dosljedno potvrđuju važnost iskustava stečenih u društvenom kontekstu za mentalno zdravlje LGBTQ+ osoba.

## Kako je seksualnim manjinama u hrvatskom društvu?

U ovom se istraživanju usmjeravamo prije svega na posljedice predrasuda na dobrobit i mentalno zdravlje u kontekstu odnosa cisrodni (rodni identitet odgovara spolu dodijeljenom pri rođenju) heteroseksualnih osoba te LGBTQ+ osoba.<sup>1</sup> Općenito, iako je zabilježen pozitivan pomak u odnosu na prethodna istraživanja, kad više od polovice Hrvata nije bilo spremno prihvatiti homoseksualnu osobu kao susjeda (Štulhofer i Rimac, 2009), Hrvatska se s obzirom na prava LGBTQ+ osoba smjestila oko sredine popisa europskih i istočnoazijskih zemalja (ILGA Europe, 2024). Većina lokalnih istraživanja provedena je na studentskim uzorcima, gdje se dosljedno pokazuje podijeljenost u stavovima o seksualnim manjinama (Huić i sur., 2015; Pranjić i Bakin Batnožić, 2020; Takšić i sur., 2023). Ti su rezultati u skladu s međunarodnim analizama, prema kojima se Hrvatska smjestila oko sredine popisa od više od osamdeset država s obzirom na udio homofobnih osoba u ukupnom stanovništvu (Tausch, 2025). Prema popisu stanovništva iz 2021. godine, oko četiri petine<sup>2</sup> Hrvata rimokatoličke je vjeroispovijedi. Iz perspektive rimokatolika, LGBTQ+ zajednica u terminima integrirane teorije prijetnji (Stephan i Stephan, 2000) može predstavljati simboličku prijetnju – prijetnju pravima, vrijednostima i identitetu vlastite grupe (detaljnije u Ayoub, 2014; Wilkins i sur., 2022). Primjerice, doživljaj simboličke prijetnje može se zasnivati na suprotstavljanju LGBTQ+ zajednice tradicionalnom konceptu obitelji (detaljnije u Garmaž, 2019). S druge strane, znanje mladih o LGBTQ+ temama procjenjuje se niskim, a najzastupljeniji izvor informacija jest sat vjeronauka (Huić i Matković, 2020). Budući da je evolucijski grupna pripadnost jedina predstavljala kakvo-takvo jamstvo preživljavanja (Fiske, 2000), LGBTQ+ osobe suočene su s pritiskom prikrivanja vlastita identiteta da bi se što bolje uklopile, što se vidi i iz istraživanja manjinskoga stresa (Blažev i

sur., 2025b; Jelić i Kožljan, 2017). Istodobno, suočavaju se s raznim oblicima verbalnoga i fizičkoga zlostavljanja te propitivanja mentalnoga zdravlja. Stav da je mentalno zdravlje LGBTQ+ osoba narušeno nije netočan – primjerice, nedavna metaanaliza koju su proveli Wittgens i suradnici (2022) pokazala je da LGBTQ+ osobe u odnosu na cisrodne heteroseksualne osobe imaju veću vjerojatnost doživjeti depresiju, suicidalnost, anksioznost ili zlouporabljivati alkohol. Također, općenito prikrivanje seksualne orijentacije pokazalo se povezanim s narušenim mentalnim zdravljem (Pachankis i sur., 2020). Rezultati istraživanja provedenih u hrvatskom kontekstu potvrđuju ove nalaze: istraživanja upućuju na značajan manjinski stres, osjećaj nesigurnosti u društvu (Blažev i sur., 2025a, 2025b; Jelić i Kožljan, 2017; Kamenov i sur., 2015) te narušeno mentalno zdravlje i dobrobit kod LGB osoba, posebice ako osjećaju da moraju skrivati svoju seksualnost (Blažev i sur., 2025a, 2025b; Kamenov i sur., 2015).

Zaključno, iako uvjerenje o narušenom mentalnom zdravlju kod LGBTQ+ osoba nije predrasuda, perspektiva manjinskoga stresa pokazuje da pripisivanje problema s mentalnim zdravljem LGBTQ+ pojedincima, ignorirajući pritom ulogu društva, jest.

## Znamo li sve o manjinskom stresu?

Frost i Meyer (2023) upozoravaju na tri smjera daljnega razvoja istraživanja manjinskoga stresa.

Prvo, ističu da je većina istraživanja vezanih uz manjinski stres provedena u kontekstu WEIRD (*western, educated, industrialized, rich, democratic*) zemalja, pri čemu posebice ističu važnost provjere robusnosti rezultata u kontekstu zemalja koje naginju kolektivizmu. Socijalistička povijest Hrvatske u kombinaciji s relativno niskim suvremenim rezultatom na ljestvici individualizma (Hofstede, n.d.) upućuje na potencijal hrvatskih istraživanja za dopunjavanje nedostataka u postojećoj bazi znanja.

Drugo, Frost i Meyer (2023) upozoravaju na kritičnost nekih autora prema usmjerenosti istraživanja na negativne ishode, ignorirajući pritom dobrobit u širem kontekstu. Iako postoji sinteza istraživanja provedenih u kontekstu dobrobiti, prema kojoj se ispostavilo da osobe izložene manjinskom stresu u prosjeku žive manje autentično, što je povezano s manjom dobrobiti i zadovoljstvom životom, i u tom je pregledu istaknuta potreba za dodatnim istraživanjima zbog heterogenosti ranijih radova (Roberts i sur., 2025). Stoga su uključivanje mjera dobrobiti uz mjere tipične za kliničku psihologiju i dalje važan korak naprijed u razumijevanju manjinskoga stresa.

Konačno, Frost i Meyer (2023) ističu i manjkavost istraživanja usmjerenih na načine uspješnoga nošenja s manjinskim stresorima. Usmjerimo li se na psihološke mehanizme i potencijalne resurse, efekti manjinskoga stresa mogu se objasniti i modelom psihološke medijacije (Hatzenbuehler, 2009), prema kojem manjinski stres utječe na opće kognitivne procese LGBTQ+ osoba, umanjujući im resurse i potičući ruminacije. Prema ovom modelu, narušavanje kognitivnih procesa i resursa dovodi do narušavanja mentalnoga zdravlja i dobrobiti.

Razumijevajući navedene napomene, u ovom istraživanju provedenom na hrvatskom uzorku na dobrobit ne gledamo isključivo kroz prizmu mentalnoga zdravlja (simptoma depresije) nego i kroz prizmu zadovoljstva raznim domenama života. Dodatno, usmjeravamo se i na ulogu samosuosjećanja kao potencijalnoga resursa u kontekstu manjinskoga stresa.

### **Samosuosjećanje kao resurs za nošenje s manjinskim stresom**

Samosuosjećanje je definirano kao svjesnost vlastite patnje, prepoznavanje njezinih uzroka te briga i dobrota prema sebi, uz prihvaćanje vlastitih mana bez osuđivanja (Neff, 2003). Sastoji se od tri dimenzije: ljubaznosti i dobrote prema sebi, osjećaja zajedničke ljudskosti i svjesnoga prihvaćanja bolnih emocija. Na razvoj samosuosjećanja snažno utječe okolina – osobito socijalna podrška, obiteljski odnosi i kultura – koja može poticati ili otežavati njegovo izražavanje (Clarke, 2024; Lathren i sur., 2019; Neff i sur., 2008). Nedavna metaanaliza pokazala je da su LGBTQ+ osobe s višim samosuosjećanjem imale manje problema s mentalnim zdravljem te su postizale više rezultate na skalama dobrobiti u odnosu na LGBTQ+ osobe s nižim samosuosjećanjem (Helminen i sur., 2023). Drugim riječima, samosuosjećanje može biti važan resurs, koji zbog neugodnih povratnih informacija (odnosno, izloženosti manjinskom stresu) može biti narušen (u skladu s modelom psihološke medijacije; Hatzenbuehler, 2009). Narušenost samosuosjećanja može stajati u pozadini narušenoga mentalnog zdravlja.

### **CILJEVI I HIPOTEZE**

Ovim istraživanjem nastojimo dopuniti postojeću bazu znanja o manjinskom stresu u skladu s opaskama Frosta i Meyera (2023) o nedostatku istraživanja na uzorcima izvan WEIRD država, uz širi pogled na mentalno zdravlje te testiranje mehanizama koji pojedincima mogu olakšati nošenje s manjinskim stresom. Prvi cilj ovog istraživanja bio je provjeriti je li opravdano razliku u mentalnom zdravlju i dobrobiti (simptomima depresije i zadovoljstvu životom) između cisrodnih

heteroseksualnih i LGBTQ+ osoba pripisati manjinskom stresu. Na temelju postojećih istraživanja očekivali smo da će manjinski stres biti puni medijator odnosa rodne i seksualne orijentacije i depresivnih simptoma, odnosno zadovoljstva životom.

Drugi cilj ovog istraživanja bio je pokušati razlikom u samosuosjećanju objasniti barem dio odnosa manjinskoga stresa i dobrobiti (simptoma depresije i zadovoljstva životom). U ovom smo slučaju, prihvaćajući literaturu koja spominje samosuosjećanje kao zaštitni faktor u kontekstu manjinskoga stresa, također očekivali utvrditi barem djelomičnu medijaciju.

## METODA

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### Sudionici

Analize prikazane u ovom radu temelje se na uzorku od 358 sudionika. U uzorku je bilo manje cisrodnih heteroseksualnih osoba (39 %,  $N = 139$ ) od LGBTQ+ osoba (61 %,  $N = 219$ ). Većinu uzorka cisrodnih heteroseksualnih osoba činile su žene (63 % u odnosu na 37 % muškaraca). Nešto veći udio žena zabilježen je u uzorku LGBTQ+ osoba (74 %, uz 12 % muškaraca, 7 % rodno varijantnih osoba, 4 % transrodnih/transspolnih osoba te 3 % osoba koje još uvijek preispituju svoj identitet). Što se tiče ostalih obilježja, LGBTQ+ uzorak bio je u prosjeku mlađi od uzorka cisrodnih heteroseksualnih osoba ( $M_{LGBTQ+} = 27,1$ ,  $M_{CH} = 33,6$ ,  $t(233) = 6,05$ ,  $p < 0,001$ ) te niže obrazovan ( $M_{LGBTQ+} = 0,53$ ,  $M_{CH} = 0,76$ ,  $t(326,4) = 4,79$ ,  $p < 0,001$ ). Isti udio obaju uzoraka (26 %) živio je u primorskoj Hrvatskoj, uz podjednak udio stanovnika kontinentalne Hrvatske (73 % cisrodnih heteroseksualnih naprama 69 % LGBTQ+).

### Mjere

*Simptome depresije* mjerili smo ljestvicom od četiri čestice preuzetom iz Europskoga društvenog istraživanja (European Social Survey European Research Infrastructure, 2025). Skala se sastoji od četiriju čestica koje mjere učestalost depresivnih simptoma (Tablica 1). Sudionici su odgovore davali na ljestvici od četiri stupnja, u rasponu od "nikad ili gotovo nikad" do "stalno ili gotovo stalno". Jednofaktorski model pokazao je primjereno slaganje s podacima (skalirani CFI = 0,978, RMSEA = 0,230 (90 % CI [0,171, 0,295]), SRMR = 0,055) i zadovoljavajuću unutarnju konzistenciju ( $\alpha = 0,84$ ). Viši konačni rezultat označavao je veću učestalost simptoma depresije.

*Zadovoljstvo životom* mjerili smo kao zajednički faktor temeljen na česticama zadovoljstva u šest životnih domena (do-

stignuće, sigurnost, zdravlje, odnosi s bližnjima, posao i slobodno vrijeme). Mjera je osmišljena po uzoru na devet čestica Indeksa osobne dobrobiti (Personal Wellbeing Index; Cummins i sur., 2003; International Wellbeing Group, 2013). Zbog ograničena prostora u upitnik nismo uključili opcionalne čestice (opća procjena zadovoljstva životom i zadovoljstvo spiritualnošću) te (zbog očekivanoga preklapanja s očekivanom diskriminacijom) česticu zadovoljstva budućom sigurnosti. Sudionici su odgovore davali na ljestvici u rasponu od 0 (potpuno nezadovoljan/na) do 10 (potpuno zadovoljan/na). Jednofaktorski model pokazao je primjereno slaganje s podacima (robustni CFI = 0,954, robustna RMSEA = 0,100 (90 % CI [0,068, 0,134]), SRMR = 0,042) i zadovoljavajuću unutarnju konzistenciju ( $\alpha = 0,82$ ). Viši konačni rezultat označavao je veće zadovoljstvo životom.

Za mjerenje *manjinskoga stresa* namjeravali smo rabiti skalu manjinskoga stresa (Norcini Pala i sur., 2017; za hrvatsku validaciju pogledati Blažev i sur., 2025a). Međutim, dio ljestvica ove mjere formiran je tako da eksplicitno traže procjenu iskustva LGBTQ+ osoba u odnosu na cisrodne heteroseksualne osobe, što onemogućuje primjenu skale na općem uzorku. Vodeći pritom i računa o ograničenom prostoru, za potrebe istraživanja prilagodili smo tri ljestvice manjinskoga stresa za primjenu na općoj populaciji: ljestvicu strukturalne stigme, ljestvicu doživljene stigme te ljestvicu očekivane diskriminacije. Svaka ljestvica sadržavala je po tri čestice (Tablica 1). Iako se i trofaktorski model pokazao marginalno primjerenim podacima (robustni CFI = 0,938, robustna RMSEA = 0,103 (90 % CI [0,084, 0,124]), SRMR = 0,062), modelom procijenjene korelacije pokazale su se umjerenima do visokima, pri čemu je modelom procijenjena korelacija doživljene stigme i očekivane diskriminacije prelazila konvencionalni prag za test-retest pouzdanost ( $r = 0,73$ ).

Uzevši to u obzir, kao i težnju izbjegavanju preopterećivanja modela, manjinski stres modelirali smo kao opći faktor svih devet čestica uz korelirane rezidualne svake čestice koje pripadaju pojedinom izvornom faktoru, osim posljednjih dviju (rizik zlostavljanja i meta uvreda), kako bismo osigurali konvergenciju modela. Takav model pokazao je primjereno slaganje s podacima (robustan CFI = 0,995, robustna RMSEA = 0,032 (90 % CI [0,000, 0,062]), SRMR = 0,027) i zadovoljavajuću unutarnju konzistenciju ( $\alpha = 0,74$ ). Viši rezultat označavao je veću razinu doživljenoga manjinskoga stresa.

*Samosuosjećanje* je mjereno ljestvicom samosuosjećanja (Neff, 2003; za hrvatsku validaciju pogledati Hanžek, 2012). Izvorno ljestvica sadrži 26 čestica, koje odražavaju šest faktora:

samoosuđivanje, briga prema sebi, svjesna usredotočenost, izolacija, pretjerana identifikacija i međuzavisnost. No ima i mnogo drugačijih konceptualizacija ove skale koje su dobile empirijsku potporu (Neff i sur., 2019), uključujući i kratku verziju koja predstavlja izbor čestica iz pune verzije (Raes i sur., 2011).

Za potrebe ovog istraživanja formirali smo opći faktor na temelju čestica skraćene skale samosuosjećanja, pri čemu smo korelirali rezidualne obrnuto kodiranih čestica zbog metodskoga faktora. Prije analize obrnuto smo kodirali čestice čiji je viši rezultat izvorno označavao manje samosuosjećanje. Takav model pokazao je primjereno slaganje s podacima (robustan CFI = 0,954, robusna RMSEA = 0,077 (90 % CI [0,060, 0,094]), SRMR = 0,043) i zadovoljavajuću unutarnju konzistenciju ( $\alpha = 0,71$ ). Viši rezultat označavao je veće samosuosjećanje.

U analizama smo rabili i više sociodemografskih varijabli, pri čemu su sudionici za svaku od njih mogli odabrati da ne žele odgovoriti. Kako bismo maksimalizirali anonimnost, sudionici su dob iskazivali odabirom dobnoga razreda kojem pripadaju. Pritom je početni razred obuhvaćao sudionike od 18 do 25 godina, dok su svi ostali razredi obuhvaćali petogodišnje intervale. Za potrebe analiza, dob je rekodirana tako da je svakom sudioniku kao vrijednost pripisana središnja vrijednost odabranoga razreda.

Nadalje, sudionici su mogli odabrati koji od ponuđenih odgovora (muški, ženski, transrodna/transspolna osoba, rodno varijantna osoba, interspolna osoba ili preispitujem) najbolje opisuje njihov rod (ili slobodno upisati rod ako ne pripadaju ni jednoj kategoriji).

Isto tako, sudionici su mogli odabrati koji od ponuđenih odgovora (heteroseksualna osoba, homoseksualna osoba, biseksualna osoba, aseksualna osoba, panseksualna osoba, preispitujem) najbolje opisuje njihovu seksualnu orijentaciju (ili slobodno upisati seksualnu orijentaciju ako ne pripadaju ni jednoj kategoriji). Kombinacijom odgovora na navedenim varijablama formirali smo novu varijablu koja je uzorak dijelila na cisrodne heteroseksualne osobe i LGBTQ+ osobe.

Sudionici su iskazivali i najviši završeni stupanj obrazovanja (osnovna škola, srednja škola, fakultet ili doktorat), što smo za potrebe analize (zbog niskih frekvencija pojedinih kategorija) dihotomizirali, kako bi niža vrijednost označavala primarno ili sekundarno obrazovanje, a viša tercijarno (uključujući doktorat).

Konačno, sudionici su odgovarali stanuju li trenutačno u primorskoj Hrvatskoj, kontinentalnoj Hrvatskoj ili izvan Hrvatske.

## Postupak

Podaci u ovom istraživanju prikupljeni su u sklopu širega projekta između 5. svibnja i 25. lipnja 2025. godine, a prikupljanje podataka odobrilo je Etičko povjerenstvo Instituta Pilar (broj odobrenja: 11-73/25-1231). Prikupljanje podataka provedeno je *online*, pri čemu su poziv na sudjelovanje u istraživanju istraživači dijelili na društvenim mrežama (putem privatnih te profila Grof Darkula)<sup>3</sup> i mailing lista, uz molbu potencijalnim sudionicima da poziv proslijede i svojim poznanicima.

Prije ispunjavanja upitnika sudionicima je prikazan tekst informiranoga pristanka, koji je potencijalne sudionike informirao o tome da je fokus istraživanja na razumijevanju dobiti i njezinih odrednica. Sudionicima su predstavljene i provoditelji istraživanja i njihove institucije te im je objašnjeno da je njihovo sudjelovanje potpuno anonimno i dobrovoljno te da mogu odustati ili povući pristanak u bilo kojoj točki istraživanja bez posljedica. Naglašeno je i da će podaci biti dostupni i drugim istraživačima te na koji se mail mogu javiti s dodatnim pitanjima.

Nakon čitanja teksta sudionici su pomoću pet čestica s dihotomnim (da/ne) odgovorima označavali da razumiju pročitani tekst i slažu se sa sudjelovanjem u istraživanju. Sudionici nisu primili nikakvu materijalnu naknadu za sudjelovanje u istraživanju. Naposljetku, sudionicima smo i nakon ispunjavanja svih upitnika eksplicitno ponudili opciju povlačenja pristanka.

## Analitički pristup

Vodeći se rezultatima dosadašnjih analiza i simulacija, procijenili smo da nam za osiguravanje valjanosti rezultata i primjerenosti statističku snagu treba prikupiti između 350 i 400 sudionika (Kretschmar i Gignac, 2019; Lovakov i Agadullina, 2021; Sim i sur., 2022; Shi i sur., 2022). Ukupno je 389 sudionika ispunilo sve upitnike, od čega je njih 358 udovoljilo svim uvjetima sudjelovanja u istraživanju i kvalitete podataka (nasumični ili ponavljajući odgovori, aberantni rezultati) te ih je bilo moguće jednoznačno grupirati u LGBTQ+ ili heteroseksualne cisrodne osobe (detaljnije u Dodatnim materijalima). Njihovi su podaci analizirani u programskom jeziku R (R Core Team, 2023), pri čemu smo se dominantno oslanjali na funkcije iz paketa lavaan (Rosseel, 2012) i semTools (Jorgensen i sur., 2018). Razlog oslanjanju na te pakete bila je primjena metodologije strukturnoga modeliranja kako bismo u okviru medijacijskih modela odgovorili na istraživačka pitanja. U duhu strukturnoga modeliranja, prije interpretacije rezultata pro-

vjeravali smo slaganje modela s podacima, oslanjajući se u prvom redu na CFI, RMSEA i SRMR, pri čemu smo uvažavali činjenicu da RMSEA može suboptimalno funkcionirati kod modela s malo stupnjeva slobode, a CFI kod složenijih modela (Kenny i McCoach, 2003; Kenny i sur., 2015; Kline, 2015). Kod procjene slaganja modela s podacima prihvatljivim slaganjem smatrali smo procjene kod kojih je CFI > 0,95 uz SRMR manji od 0,08 (Hu i Bentler, 1999) ili interval pouzdanosti RMSEA čija gornja granica ne prelazi 0,10 (Kline, 2015).

Dodatno, obratili smo pažnju i na mjerne ljestvice varijabli: sukladno zaključku Rhemtulle i suradnika (2012), čestice depresije tretirali smo kao ordinarne indikatore jer su mjerene na samo četiri razine te smo se oslanjali na rezultate WLSMV metode procjene (engl. *Weighted Least Squares Mean and Variance adjusted*), dok smo se kod modela koji ne sadržavaju čestice depresije oslanjali na rezultate dobivene uz MLR metodu korekcije (metodu najveće vjerojatnosti robusnu na manja odstupanja modela od podataka te odstupanja od pretpostavke normalnosti).

Baza podataka upotrijebljena za potrebe ovog istraživanja, uz detaljni uvid u analitičke postupke, može se naći u Dodatnim materijalima 1.

## REZULTATI

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U prvom koraku analize prikazujemo deskriptivne podatke za depresivne simptome, zadovoljstva i manjinski stres (uz usporedbu dvaju uzoraka; Tablica 1). Rezultati nedvosmisleno pokazuju da je dobrobit LGBTQ+ osoba narušena u odnosu na cisrodne heteroseksualne osobe, jer doživljavaju veću učestalost simptoma depresije uz manje zadovoljstvo životom. LGBTQ+ osobe iz našeg uzorka također doživljavaju značajno više razine manjinskoga stresa (uz iznimku fizičke agresije) u odnosu na cisrodne heteroseksualne osobe. Veličine učinka u pravilu su umjerene do visoke, pri čemu kod nekih usporedbi Cohenov  $d$  prelazi 1. Takvi nalazi u kontekstu manjinskoga stresa potvrđuju njegovu konstruktivnu valjanost (jer je karakterističan za manjinu – LGBTQ+ osobe), iako, sukladno ranijim radovima (Sattler i sur., 2017), u nekim manjim razinama postoji i među većinskom grupom.

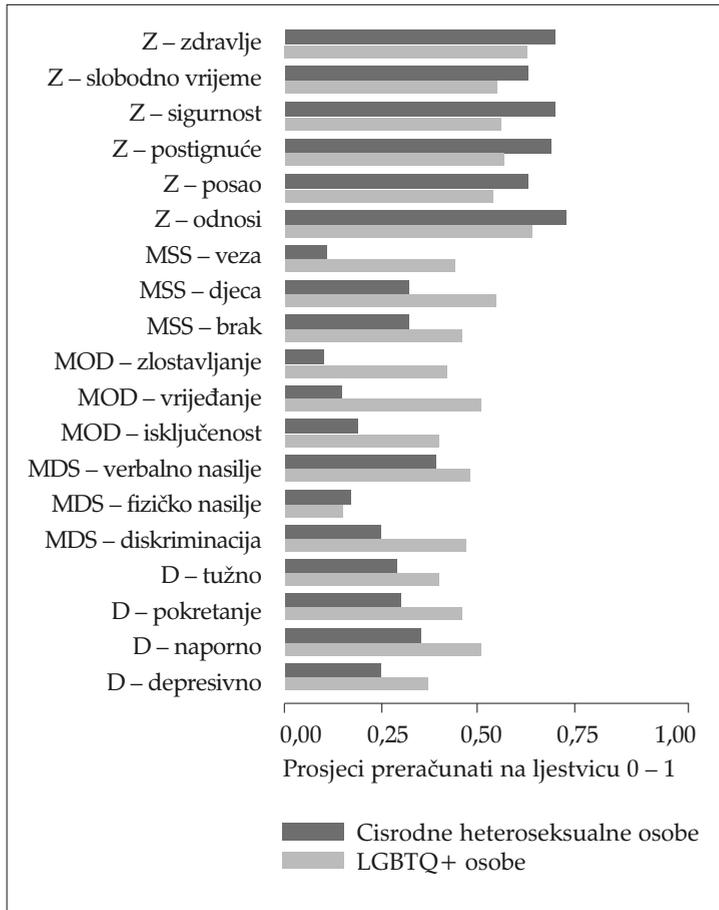
Opisane razlike vizualizirane su na Slici 1, uz skaliranje prosjeka na ljestvicu u rasponu od 0 (minimalni rezultat) do 1 (maksimalni rezultat) zbog lakše usporedivosti. Nakon uvida u deskriptivne podatke, usmjeravamo se na rezultate modela sa serijalnom medijacijom. S obzirom na razlike u metodama procjene (WLSMV naprama MLR), zasebno prikazujemo rezultate za depresivne simptome i zadovoljstvo životom (Tablica 2). Skica testiranih modela prikazana je na Slici 2.

	Čestica	MCH	MLGBTQ+	<i>t</i>	<i>df</i>	<i>p</i>	Cohen <i>d</i>
Depresivni simptomi	Osjećaj depresivnosti u proteklih tjedan dana	1,76	2,12	-4,19	293,8	<0,001	-0,45
	Osjećaj napornosti svih aktivnosti u proteklih tjedan dana	2,06	2,52	-4,81	302,1	<0,001	-0,52
	Osjećaj tuge u proteklih tjedan dana	1,87	2,21	-4,27	295,7	<0,001	-0,46
	Osjećaj nemogućnosti pokretanja u proteklih tjedan dana	1,91	2,39	-4,93	317,8	<0,001	-0,52
Zadovoljstvo	Koliko ste zadovoljni (ili nezadovoljni) onim što postizete u životu?	6,87	5,72	4,68	291,0	<0,001	0,51
	Koliko ste zadovoljni (ili nezadovoljni) svojim doživljajem sigurnosti?	6,96	5,62	5,01	273,1	<0,001	0,56
	Koliko ste zadovoljni (ili nezadovoljni) svojim zdravljem?	7,01	6,27	2,91	290,7	0,004	0,32
	Koliko ste zadovoljni (ili nezadovoljni) svojim odnosima s bližnjima?	7,31	6,38	3,96	278,7	<0,001	0,44
	Koliko ste zadovoljni (ili nezadovoljni) svojim poslom?	6,33	5,45	3,07	277,3	0,002	0,34
	Koliko ste zadovoljni (ili nezadovoljni) svojim slobodnim vremenom?	6,27	5,55	2,56	281,6	0,011	0,28
Manjinski stres	Ne vjerujem da ću tijekom života uspjeti stupiti u brak.	1,86	2,83	-6,75	323,1	<0,001	-0,71
	Ne vjerujem da ću uspjeti imati ili posvojiti djecu.	2,28	3,18	-5,67	289,5	<0,001	-0,62
	Ne vjerujem da ću uspjeti imati vezu koja je zakonski prepoznata.	1,45	2,78	-10,58	354,3	<0,001	-1,06
	Učestalost doživljaja verbalne agresije tijekom života	2,55	2,91	-3,52	288,5	0,001	-0,38
	Učestalost doživljaja fizičke agresije tijekom života	1,50	1,61	-1,18	303,7	0,238	-0,13
	Učestalost doživljaja diskriminacije tijekom života	2,00	2,89	-8,10	293,4	<0,001	-0,88
	Osjećam se isključeno iz društva.	1,74	2,59	-7,20	328,7	<0,001	-0,75
	Osjećam da postoji velik rizik da budem zlostavljan/a.	1,41	2,69	-12,00	353,2	<0,001	-1,16
Očekujem da ću biti meta uvreda.	1,60	3,04	-11,94	352,6	<0,001	-1,20	

**TABLICA 1**  
 Deskriptivni podaci cisrodni heteroseksualnih i LGBTQ+ sudionika izračunani za varijable depresivnih simptoma, zadovoljstva i manjinskoga stresa

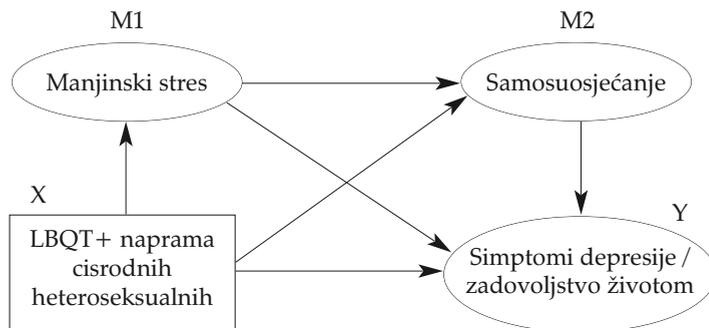
*Napomena.* U analizama nije provedena korekcija za višestruke usporedbe – no i da je provedena Bonferronijeva korekcija, sve usporedbe uz *p*-vrijednost manju od 0,003 pokazale bi se značajnima.

➔ SLIKA 1  
Grafički prikaz pro-  
sječnih rezultata  
cisrodnih heteroseksualnih i LGBTQ+  
osoba na česticama  
dobrobiti i manjin-  
skog stresa



*Napomena.* D = simptomi depresije, Z = zadovoljstvo, MSS = manjinski stres – strukturalna stigma, MDS = manjinski stres – doživljena stigma, MOD = manjinski stres – očekivana diskriminacija

➔ SLIKA 2  
Skica testiranih  
modela serijalne  
medijacije



Model sa simptomima depresije kao kriterijem pokazao je primjereno slaganje s podacima (skalirani CFI = 0,892, RMSEA = 0,048 (90 % CI [0,042, 0,055], SRMR = 0,055), kao i model sa zadovoljstvom životom kao kriterijem (robustan CFI =

0,930, robusna RMSEA = 0,052 (90 % CI [0,046, 0,058], SRMR = 0,065). Rezultati testiranih modela prikazani su u Tablici 2.<sup>4</sup> Usmjerimo li se na odnos prediktora i kriterija, iz Tablice 2 vidi se da unatoč značajnom ukupnom efektu (odnosno potvrdi da LGBTQ+ osobe doživljavaju više depresivnih simptoma i manje zadovoljstvo životom), odnos roda i seksualnosti s varijablama dobiti nestaje nakon uvođenja manjinskoga stresa i samosuosjećanja u model. Drugim riječima, efekt razlike cisrodnih heteroseksualnih osoba i LGBTQ+ osoba posredovan je manjinskim stresom (i samosuosjećanjem) u cijelosti.

Usmjerimo li se na odnos medijatora i kriterija, Tablica 2 pokazuje da oba medijatora ostvaruju značajan odnos s kriterijima: više manjinskoga stresa povezano je s više depresivnih simptoma i nižim zadovoljstvom životom, dok je više samosuosjećanja povezano s manje depresivnih simptoma i više zadovoljstva životom. To znači da manjinski stres, unatoč značajnom indirektnom odnosu preko samosuosjećanja, i dalje ostvaruje značajan odnos s varijablama dobiti. Drugim riječima, efekt manjinskoga stresa na varijable dobiti djelomično je posredovan samosuosjećanjem.

Uzevši sve zajedno u obzir, možemo zaključiti da se dio nestalog odnosa razlike cisrodnih heteroseksualnih osoba i LGBTQ+ osoba s varijablama dobiti može objasniti medijacijom izravno preko manjinskoga stresa, a dio medijacijom preko manjinskoga stresa i samosuosjećanja. Ovakvi rezultati pokazuju da se razlika LGBTQ+ i heteroseksualnih cisrodnih osoba u varijablama dobiti može objasniti manjinskim stresom, pri čemu se tek dio odnosa manjinskoga stresa i varijabli dobiti može pripisati reduciranom samosuosjećanju.

Istraživani odnos	Y = simptomi depresije		Y = zadovoljstvo životom	
	$\beta$	$p$	$\beta$	$p$
LGBTQ+ (naprama CH) → manjinski stres	0,56	<0,001	0,56	<0,001
LGBTQ+ (naprama CH) → samosuosjećanje	-0,03	0,664	-0,08	0,252
LGBTQ+ (naprama CH) → Y	-0,05	0,299	0,04	0,593
manjinski stres → samosuosjećanje	-0,49	<0,001	-0,41	<0,001
manjinski stres → Y	0,36	0,001	-0,39	<0,001
manjinski stres → samosuosjećanje → Y	0,26	<0,001	-0,16	<0,001
samosuosjećanje → Y	-0,54	<0,001	0,39	<0,001
LGBTQ+ (naprama CH) → manjinski stres → Y	0,20	<0,001	-0,22	<0,001
LGBTQ+ (naprama CH) → manjinski stres → samosuosjećanje → Y	0,15	<0,001	-0,09	<0,001
ukupni efekt (LGBTQ+ (naprama CH) → Y)	0,30	<0,001	-0,27	<0,001
$R^2$	0,57		0,42	

● **TABLICA 2**  
Sažeti ishodi serijalne  
medijacije

*Napomena.* CH = cisrodne heteroseksualne osobe.

Provedenim analizama pružili smo nekoliko važnih uvida u odnos seksualnih manjina i mentalnoga zdravlja. Prvo, u skladu s prijašnjim istraživanjima (Wittgens i sur., 2022), pokazali smo da su LGBTQ+ osobe u odnosu na cisrodne heteroseksualne osobe u bitno nepovoljnijem položaju glede mentalnoga zdravlja i dobrobiti. No, također u skladu s rezultatima prijašnjih istraživanja (Bränström, 2017; Sattler i sur., 2017), provedenom je analizom utvrđeno da se varijacije u mentalnom zdravlju poklapaju s varijacijama u manjinskom stresu te spomenuta razlika na mjerama dobrobiti nestaje kad se u obzir uzmu razlike u manjinskom stresu. Time smo, uz potvrdu hipoteze, dopunili bazu znanja o manjinskom stresu na uzorku na kakvima se rjeđe provode istraživanja ovoga tipa (Frost i Meyer, 2023).

No otišli smo i korak dalje – utvrdili smo da se odnos manjinskoga stresa i dobrobiti može dijelom objasniti smanjenjem samosuosjećanja. Uzmemo li u obzir da samosuosjećanje predstavlja važan resurs u kontekstu mentalnoga zdravlja (Neff, 2003, 2023), ovi rezultati, pod pretpostavkom kauzalnosti, govore da društvo putem manjinskoga stresa može dijelom određivati mentalno zdravlje seksualnih manjina kroz redukciju resursa. Takav je nalaz usklađen i s modelom psihološke medijacije, što također predstavlja važnu dopunu postojeće baze znanja o manjinskom stresu u vidu potencijalnih efekata na dostupne resurse (Frost i Meyer, 2023; Hatzenbuehler, 2009). Iako je vrijedno istaknuti da je samosuosjećanje resurs koji se radom na sebi može izgraditi (Neff, 2023), potrebna su dodatna istraživanja za donošenje čvrstih uzročno-posljedičnih zaključaka glede toga dijela istraživanoga modela. Naime, kao što biopsihosocijalni model (Engel, 1981) predlaže, društvene okolnosti predstavljaju tek jednu od odrednica mentalnoga zdravlja, pri čemu provedeno istraživanje ne omogućuje eliminaciju temeljenu na pojedinčevim individualnim obilježjima. No čak i da zanemarimo metodološka ograničenja ovog istraživanja i zaključimo da bismo poticanjem učenja o samosuosjećanju mogli poboljšati mentalno zdravlje LGBTQ+ osoba u Hrvatskoj, u obzir treba uzeti da smo u tom dijelu modela utvrdili tek djelomičnu medijaciju, odnosno da značajan (i većinski) dio odnosa manjinskoga stresa i mentalnoga zdravlja i dobrobiti nismo uspjeli statističkim putem pripisati padu samosuosjećanja. To znači da bi individualne intervencije (barem one usmjerene isključivo na samosuosjećanje), pod pretpostavkom kauzalnosti, polučile u najboljem slučaju djelomične rezultate, što nas vodi dvama zaključcima: ili smo "promašili intervenciju" (i postoji univerzalna intervencija koja bi riješila sve probleme vezane uz manjinski stres na razini pojedinca) ili ipak nije sve na pojedincu i biologiji. A to nas vodi

natrag na početak, na biopsihosocijalni model zdravlja i, specifično, njegovu socijalnu komponentu.

Sattler i suradnici (2017), dobivši rezultate poput naših, zaključili su da je društvo potpuno odgovorno za narušeno mentalno zdravlje LGBTQ+ osoba, što je u skladu s idejom manjinskoga stresa (Frost i Meyer, 2023). Nacrtno istraživanje nije bio eksperimentalni, pa ne možemo jamčiti da su naše grupe (cisrodne heteroseksualne osobe i LGBTQ+ osobe) bile statistički izjednačene po svim obilježjima prije "utjecaja društva", odnosno da opažene razlike u dobrobiti možemo kauzalno pripisati isključivo manjinskom stresu. No ima više eksperimentalnih istraživanja koja nude argumente u prilog opisanoj kauzalnoj vezi. Primjerice, poznato je da dosjećanje nepravdanih situacija iz osobne prošlosti dovodi do dužih i intenzivnijih emocionalnih reakcija u odnosu na dosjećanje neutralnih iskustava (Mikula i sur., 1998). U laboratorijskim su uvjetima istraživači (Altman i sur., 2024) uspjeli eksperimentalno inducirati simptome depresije pomoću igre *cyberball*, koja simulira isključenost iz društva (Hartgerink i sur., 2015). Postoje i argumenti u prilog raznim neugodnim emocijama eksperimentalno izazvanim ovom igrom (Weinreich i sur., 2025). Općenito, metaanalize kauzalnih istraživanja diskriminacije također govore u prilog (kratkoročno) narušenom mentalnom zdravlju kod osoba kojima je eksperimentalno izazvan doživljaj diskriminacije (Emmer i sur., 2024; Schmitt i sur., 2014). Taj se učinak pokazao posebice snažnim ako je diskriminacija u eksperimentalnoj manipulaciji predstavljena kao ponavljajuće iskustvo (u usporedbi s izoliranim slučajem). Od novijih istraživanja, i u kontekstu istraživanja posljedica rasizma, eksperimentom je utvrđeno da iskustvo diskriminacije dovodi do viših razina neugodnih emocija od svakodnevnih gnjavaža (Lui i sur., 2025). Taj efekt vidljiv je i iz perspektive promatrača – istraživanje na području kriminologije pokazalo je da sudionici nakon čitanja vinjeta koje uključuju proceduralnu nepravdu prema osobi procjenjuju da će oštećena osoba imati više problema s mentalnim zdravljem od iste osobe u proceduralno pravednoj situaciji (Kyprianides i Bradford, 2025). Postoje i optimističniji nalazi – na području istraživanja vršnjačkoga zlostavljanja također je poznato da zlostavljanje dovodi do internaliziranih problema s mentalnim zdravljem (poput anksioznosti i depresije), koji, u slučaju prestanka zlostavljanja, s vremenom mogu nestati (Schoeller i sur., 2018). Drugim riječima, sinteza radova potonjih autora potvrđuje da iskustva isključenosti, diskriminacije i zlostavljanja negativno djeluju na našu dobrobit i mentalno zdravlje, ali i da imamo kapacitet za oporavak od epizode takva neugodnog iskustva. No preduvjet tog oporavka jest da neu-

godno iskustvo predstavlja epizodu, a ne trajnu ili ponavljajuću pojavu.

Shvatimo li LGBTQ+ osobe kao ljude "od krvi i mesa", nemamo razloga vjerovati u njihovu imunost na spomenute efekte diskriminacija i maltretiranja, posebice ako traju godinama, kao ni sumnjati u njihov kapacitet za oporavak u slučaju prestanka diskriminacije. Time ne umanjujemo važnost pojedinačnih odluka i ponašanja, nego prihvaćamo biopsihosocijalni model u njegovoj punini, vraćajući društvu odgovornost za slobode koje ograničuje.

Prethodna je argumentacija važna, jer se nakon ustanovljavanja problema možemo zapitati kako ga riješiti. Naši rezultati, kao i biopsihosocijalni model općenito, pokazuju da individualne intervencije na manjinskom stanovništvu nisu dovoljne te da kod razvoja intervencija treba uzeti u obzir i širi kontekst.

Kod interpretacije rezultata treba u obzir uzeti i nekoliko ograničenja. Prvo ograničenje ovog istraživanja vezano je uz istraživački nacrt koji ograničuje valjanost kauzalnih zaključaka. Zatim je važno osvrnuti se i na činjenicu da je istraživanje usmjereno na samo jedan oblik problema s mentalnim zdravljem – depresivne simptome. Iako dodatna perspektiva temeljena na dobrobiti potvrđuje potencijal generalizacije dobivenih rezultata na mentalno zdravlje općenito, opravdanost takve generalizacije treba provjeriti dodatnim istraživanjima. Općenito, u budućim istraživanjima poželjno je rabiti mjere koje zahvaćaju i šire aspekte mjerenih konstrukata (depresije, dobrobiti, manjinskoga stresa), a oni su ovim istraživanjem možda previđeni (unatoč primjerenom slaganju svih ljestvica s podacima te prihvatljivoj unutarnoj konzistenciji). Konačno, prigodan uzorak ovog istraživanja prikupljen je *online*, što je moglo unijeti neravnotežu u vjerojatnost odabira sudionika (i dovesti do nešto većeg udjela LGBTQ+ žena), kakvu bismo očekivali za nacionalno reprezentativne uzorke.

Unatoč spomenutim nedostacima, istraživanjem smo uspješno provjerili primjenjivost teorije manjinskoga stresa na hrvatskom uzorku, uz uključivanje samosuosjećanja kao relevantnoga resursa. Nadamo se da će njegovi rezultati potaknuti daljnja istraživanja, nužna za destigmatizaciju manjina. Pritom smo svjesni da znanost ne može odmah riješiti sve društvene probleme na svačije zadovoljstvo, no isto tako vjerujemo da ne treba stajati po strani dok društvo određuju uvjerenja oblikovana ljudskom evolucijom ili dezinformacijama.

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<sup>1</sup> U novijem valu istog internacionalnog istraživanja (Ipsos, 2023) četiri do petnaest posto sudionika (s prosjekom od devet posto) identificiralo se kao pripadnici LGBT+ populacije.

<sup>2</sup> <https://dzs.gov.hr/vijesti/objavljeni-konacni-rezultati-popisa-2021/1270>

- <sup>3</sup> Ovim putem zahvaljujemo timu Instagram profila Grof Darkula na dijeljenju poziva za sudjelovanje u našem istraživanju.
- <sup>4</sup> Prije zajedničkoga modela testirali smo i pojedinačne medijacije: prvo medijaciju roda preko manjinskoga stresa, a zatim medijaciju manjinskoga stresa preko samosuosjećanja. Zbog ograničenoga prostora, ove analize ne opisujemo u radu, iako su dostupne u Dodatnim materijalima 1 (dostupnim na poveznici: [https://www.dugeiobiaci.com/\\_files/ugd/1354fa\\_44121ac2a30f47b4a6609d46c8d41915.pdf](https://www.dugeiobiaci.com/_files/ugd/1354fa_44121ac2a30f47b4a6609d46c8d41915.pdf)) te potvrđuju ključne nalaze prikazanoga modela. U Dodatnim materijalima 1 nalazi se i verzija analiza s dobi i obrazovanjem kao kontrolnim faktorima, čiji su rezultati gotovo identični prikazanima te zbog zalihosti također nisu prikazani.

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## Minority Stress and Mental Health: The Role of Self-Compassion

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This study examines the role of minority stress and self-compassion in the mental health of LGBTQ+ individuals within Croatian society. Building on the minority stress theory, the aim was to explore whether differences in mental health and well-being between LGBTQ+ and cisgender heterosexual individuals can be explained by minority stress exposure, and to what extent self-compassion serves as a protective factor. The results of an analysis conducted on a convenient sample of 358 participants (61% LGBTQ+)

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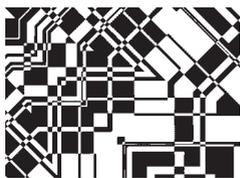
showed that LGBTQ+ people experience higher levels of minority stress, lower life satisfaction, and more frequent symptoms of depression compared to cisgender heterosexual people. A serial mediation model indicated that minority stress fully mediated the relationship between sexual orientation and mental well-being, while self-compassion was found to only partially mediate the link between minority stress and mental health. The findings highlight the importance of social context in shaping mental health, which was established in earlier studies.

Keywords: minority stress, LGBTQ+, sexual minorities, mental health, well-being, self-compassion



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# POSVOJENJE OD OSOBA HOMOSEKSUALNE ORIJENTACIJE S OSVRTOM NA REPUBLIKU HRVATSKU

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Posvojenje od osoba homoseksualne orijentacije aktualna je, ali istodobno i kontroverzna, tema. Europski sud za ljudska prava kroz svoju je praksu potvrdio slobodu država da samostalno uređuju ovo pitanje, uz uvjet zabrane diskriminatornoga postupanja. U Republici Hrvatskoj životni (istospolni) partneri nemaju mogućnost zajedničkoga posvojenja djeteta, pri čemu je dodatna konfuzija nastala odlukom Visokoga upravnog suda Republike Hrvatske iz 2022. godine. Stoga je cilj ovoga rada predstaviti problematiku posvojenja od osoba homoseksualne orijentacije s osvrtom na (ne)mogućnost posvojenja od životnih partnera u Republici Hrvatskoj te prikazati pravne implikacije odluke Visokoga upravnog suda Republike Hrvatske iz 2022. godine. Uz navedenu odluku, uzimajući u obzir kompleksnost ove teme, analiziraju se međunarodni ugovori vezani uz posvojenje, nacionalno hrvatsko obiteljsko i antidiskriminacijsko zakonodavstvo te recentne odluke Europskoga suda za ljudska prava. Budući da je iste godine i Ustavni sud Republike Slovenije donio odluku vezanu uz mogućnost posvojenja u istospolnih partnera, analizira se njezin značaj kao primjer pravne regulacije ove problematike.

Ključne riječi: posvojenje, Obiteljski zakon, najbolji interes djeteta, osobe homoseksualne orijentacije, Visoki upravni sud Republike Hrvatske



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Konvencijom UN-a o pravima djeteta (Službeni list SFRJ – Međunarodni ugovori, 15/1990, *Narodne novine – Međunarodni ugovori*, 12/1993, 20/1997, 4/1998, 13/1998; u nastavku: KPD) posvojenje se određuje kao jedan od oblika alternativne skrbi za djecu kojoj je trajno uskraćena obiteljska sredina (čl. 20. st. 1.), nepostojanjem odgovarajuće roditeljske skrbi ili, slijedom Smjernica UN-a za alternativnu skrb o djeci (Rezolucija Opće skupštine UN-a, A/RES/64/142 od 24. veljače 2010.), kada nije moguća reintegracija biološke obitelji ili povratak djeteta u nju nije u skladu s njegovim najboljim interesima (t. 161.). U pravnom smislu, posvojenje predstavlja način stvaranja pravne veze između djeteta i osobe koja mu nije biološki roditelj s učincima istovrsnim odnosu roditelj – dijete (O'Halloran, 2021; Krutzinna, 2021). Pri tome ne postoji pravo odraslih osoba na posvojenje, nego samo pravo djeteta na život u obitelji (Bracken, 2023; Jakovac-Lozić, 2021; Fenton-Glynn, 2014).

Govoreći o posvojenju, sve češće se aktualizira pitanje mogućnosti posvojenja od osoba homoseksualne orijentacije, odnosno istospolnih partnera. O ovom pitanju na razini Europe još uvijek ne postoji konsenzus, pa dio država omogućuje ovaj oblik posvojenja potpuno ili djelomično, dok dio njih i dalje ne omogućuje zajedničko posvojenje osobama homoseksualne orijentacije (Rešetar, 2022; Kraljić, 2018; Messina i D'Amore, 2018; Same-sex adoption, n.d.). Najčešći razlozi uskrate mogućnosti posvojenja od osoba homoseksualne orijentacije povezani su sa zaštitom tradicionalne obitelji te interesa djeteta (Tryfonidou, 2019). Istraživanja su pokazala kako je najveći "strah" u vezi s posvojenjem od osoba homoseksualne orijentacije usmjeren društvenom odbacivanju posvojene djece, a ne roditeljskim vještinama ili životnom stilu posvojitelja (Molina i Alarcón, 2015).

Europski sud za ljudska prava (u nastavku: ESLJP) svojom je praksom uvelike pridonio shvaćanju (ne)mogućnosti posvojenja od osoba homoseksualne orijentacije. Prije svega, utvrđeno je kako Europska konvencija za zaštitu ljudskih prava i temeljnih sloboda (*Narodne novine – Međunarodni ugovori*, 18/1997, 6/1999, 14/2002, 13/2003, 9/2005, 1/2006, 2/2010, 13/2017; u nastavku: EKLJP) predstavlja "živući" dokument, dok sam ESLJP svojim supranacionalnim karakterom i stručnošću provodi i jači utjecaj na države članice Vijeća Europe (osobito one koje nisu članice Europske unije) u kontekstu proširenja prava osoba homoseksualne orijentacije (Helfer Laurence i Ryan, 2021).

U Republici Hrvatskoj posvojenje je regulirano Obiteljskim zakonom (*Narodne novine*, 103/2015, 98/2019, 47/2020, 49/2023, 156/2023; u nastavku: ObZ), dok je pravni položaj formalnih ili neformalnih životnih partnera uređen Zakonom o život-

nom partnerstvu osoba istoga spola (*Narodne novine*, 92/2014, 98/2019; u nastavku: ZZPOIS). U odnosu na (ne)mogućnost posvojenja od osoba homoseksualne orijentacije, odnosno formalnih i neformalnih životnih partnera, raspravu i nejasnoće u pravnom smislu otvorila je odluka Visokog upravnog suda Republike Hrvatske (u nastavku: VUS) iz 2022. godine (Usž-2402/21-4 od 20. travnja 2022.). Do danas ova odluka nije rezultirala zakonodavnim promjenama, uzrokujući tako konfuziju o "pravu" životnih partnera na posvojenje unatoč antidiskriminacijskom zakonodavstvu.

Cilj je ovoga rada predstaviti problematiku posvojenja od osoba homoseksualne orijentacije s osvrtom na (ne)mogućnost posvojenja od životnih partnera u Republici Hrvatskoj te prikazati pravne implikacije odluke VUS-a. Radi potpunijeg razumijevanja ove tematike, kao i same odluke, nužan je sveobuhvatan pristup, koji obuhvaća analizu sadržaja međunarodnih ugovora, nacionalnoga zakonodavstva te prakse ESLJP-a.

Ovaj rad sastoji se od tri poglavlja. U prvom se analizira posvojenje u međunarodnom i hrvatskom pravu, s posebnim osvrtom na status potencijalnih posvojitelja te institut partnerske skrbi. U drugom poglavlju analizira se praksa ESLJP-a vezana uz posvojenje osoba homoseksualne orijentacije. U trećem poglavlju analizira se odluka VUS-a iz 2022. godine o (ne)mogućnosti posvojenja životnih partnera, referirajući se pri tome i na odredbe antidiskriminacijskoga zakonodavstva. Uz navedeno, analizira se i komparativni primjer regulacije ove tematike u slovenskom pravnom sustavu.

## **POSVOJENJE U MEĐUNARODNOM I HRVATSKOM PRAVU**

Posvojenje je, kao jedan od oblika alternativne skrbi za djecu, regulirano mnogim međunarodnim dokumentima (O'Halloran, 2021; Jakovac-Lozić, 2021; Kraljić, 2018). Na taj način postavljaju se svojevrsne smjernice za njegovu regulaciju na nacionalnoj razini, vodeći se najboljim interesom djeteta kao temeljnim načelom.

Međunarodnopravni prikaz regulacije posvojenja valja započeti analizom odredbi KPD-a kao temeljnoga međunarodnog dokumenta za zaštitu prava djece. Značenje KPD-a u regulaciji posvojenja očituje se kroz tzv. pristup utemeljen na ljudskim pravima (engl. *human rights-based approach*), prema kojemu posvojenje, u skladu s najboljim interesom djeteta, treba dosljedno slijediti sva ostala prava djeteta regulirana KPD-om (Tobin, 2023). Središnja odredba KPD-a kojim se uređuje posvojenje jest čl. 21., a prema kojem najbolji interes djeteta mora biti jedino i najvažnije razmatranje (engl. *paramount consideration*) u kontekstu posvojenja, koje pak zavisi od slučaja do slučaja (von Bary, 2023; Rešetar, 2022; Jakovac-Lozić, 2021;

Breen i sur., 2020; Davey, 2020; Cardona Llorens, 2016; Vité i Boéchat, 2008). Zajednička karakteristika svih posvojenja jest da se zasnivaju odlukom nadležnoga državnog tijela, dok su opće pretpostavke dopustivosti posvojenja određenost kriterija zasnivanja posvojenja nacionalnim pravom te dani pristanci na posvojenje (Erdem Türkelli i Vandenhole, 2022; Vandenhole i sur., 2019). U kontekstu prava djeteta na život u obitelji, važno je istaknuti kako KPD ni jednom odredbom ne precizira status posvojitelja, ostavljajući tako državama prostor za uređivanje toga pitanja, a što se onda odnosi i na pitanje posvojenja od osoba homoseksualne orijentacije, odnosno istospolnih partnera.

Na međunarodnoj razini, posvojenje je regulirano i Konvencijom o zaštiti djece i suradnji u vezi s međudržavnim posvojenjem iz 1993. (*Narodne novine – Međunarodni ugovori*, 5/2013), tzv. Haškom konvencijom o posvojenju. Kako proizlazi i iz njezina naziva, njome se uređuje postupak međudržavnoga posvojenja, a cilj joj je uspostaviti mjere provedbe međudržavnoga posvojenja u skladu s najboljim interesom djeteta, spriječiti nezakonite radnje nad djecom u vezi s posvojenjem uspostavom suradnje među državama članicama te osigurati zakonita priznanja posvojenja u državama ugovornicama (čl. 1.; Martínez-Mora, 2023). Ovom Konvencijom ne navode se pretpostavke za zasnivanje posvojenja, jer se radi o dokumentu međunarodnoga privatnog prava koji upućuje na primjenu mjerodavnoga prava prema kojem se određuju i pretpostavke za zasnivanje posvojenja. Stoga, mogućnost posvojenja od osoba homoseksualne orijentacije (uključujući i istospolne partnere) i prema ovoj Konvenciji ovisi o regulaciji posvojenja prema nacionalnom obiteljskom zakonodavstvu.

Nadalje, posvojenje je regulirano i revidiranom Europskom konvencijom o posvojenju djece iz 2008. godine (CETS 202, Strasbourg, 27. studenoga 2008.) (u nastavku: EKOPD), kojom se na razini Vijeća Europe nastoje uspostaviti zajednički standardi za ujednačavanje prakse posvojenja u europskim državama, štiteći pritom i dobrobit djeteta (Majstorović, 2021; Hrabar, 2010). Referirajući se na predznak "revidirana", EKOPD-om su osuvremenjena određena rješenja, a premda je u obiteljsko zakonodavstvo uveden najveći dio njezinih smjernica, Republika Hrvatska nije njezina stranka (Rešetar, 2022). Za razliku od KPD-a, EKOPD navodi i kategorije potencijalnih posvojitelja, a što obuhvaća i istospolne partnere. Međutim, kako EKOPD postavlja smjernice, državama strankama ostavljena je mogućnost da posvojenje omoguće i registriranim životnim partnerima, kao i neformalnim životnim partnerima koji žive u stabilnoj vezi (čl. 7. st. 2.; Jakovac-Lozić, 2007). Ovakav pristup

povezan je s načelom slobodne procjene države (engl. *margin of appreciation*), kao i promjenom strukture obitelji, pri čemu je ključno da države regulacijom pretpostavki za zasnivanje posvojenja na strani potencijalnih posvojitelja omoguće zadovoljenje fizičkih, emocionalnih i financijskih potreba djeteta (Shannon i sur., 2013).

Posvojenje je prema sudskoj praksi ESLJP-a dio prava na poštivanje obiteljskoga života, reguliranog čl. 8. EKLJP-a. Budući da je svrha čl. 8. EKLJP-a spriječiti neopravdano zadiranje države u obiteljski život, posvojenje je, kao legitimna mjera, opravdano samo kada to opravdava dobrobit djeteta, a ne želje posvojitelja (Fortin, 2009). Kako bi se zaštitila prava i interesi posvojenika, nadležna državna tijela uživaju široku slobodu procjene pri zasnivanju posvojenja, vodeći računa o različitim aspektima djetetove dobrobiti (kao što su financijska, emocionalna ili fizička dobrobit) (Kilkelly, 2016). Kao ni prema ranije analiziranim međunarodnim dokumentima, tako ni EKLJP ne jamči pravo na posvojenje (Bracken, 2023), nego samo pravo na poštivanje obiteljskoga života.

Analizom odabranih međunarodnih dokumenata vezanih uz posvojenje, razvidna je njihova isključiva usmjerenost zaštititi prava i interesa djeteta. Dakako, to ne isključuje prava potencijalnih posvojitelja, samim time ni osoba homoseksualne orijentacije, no slijedeći univerzalno načelo najboljeg interesa djeteta, kao svrha posvojenja ističe se osiguranje prikladnog i trajnog obiteljskog okruženja za dijete.

Sukladno hijerarhiji pravnih propisa, regulacija posvojenja u hrvatskom pravnom sustavu polazi od Ustava Republike Hrvatske (*Narodne novine*, 56/1990, 135/1997, 08/1998, 113/2000, 124/2000, 28/2001, 41/2001, 55/2001, 76/2010, 85/2010, 05/2014), prema kojemu država osobitu skrb posvećuje maloljetnicima bez roditelja i onima za koje se roditelji ne brinu (čl. 65. st. 4.; Jakovac-Lozić, 2000). Time se ukazuje na socijalni karakter države, koja preuzima skrb o djetetu kada to roditelji ne mogu, osiguravajući mu tako uvjete za pravilan rast i razvoj (Hrabar, 2021a). Osim toga, ova ustavna odredba osnova je daljnje zakonodavne regulacije posvojenja.

Prema ObZ-u, posvojenje se definira kao poseban oblik obiteljsko-pravnoga zbrinjavanja i zaštite djeteta bez odgovarajuće roditeljske skrbi sa svrhom stvaranja trajnog odnosa roditelj – dijete (čl. 180. st. 1. ObZ-a). Posvojenje se tako usmjera zaštititi djetetova prava na život u obitelji, pri čemu omogućavanje roditeljstva posvojiteljima prestaje biti jedan od isključivih ciljeva posvojenja, što je u skladu s međunarodnim dokumentima koji kao cilj posvojenja ističu stabilno i prikladno obiteljsko okruženje za dijete (Rešetar, 2022). U hrvatskom obiteljskom zakonodavstvu postupak posvojenja čine postu-

pak procjene podobnosti i prikladnosti za posvojenje, čiji je pozitivni ishod uvjet za upis u Registar potencijalnih posvojitelja (čl. 200. – 207. ObZ-a) te sam postupak zasnivanja posvojenja, odnosno donošenja konačne odluke (čl. 208. – 217. ObZ-a).

Govoreći o aktivnoj adoptivnoj sposobnosti, točnije životnom statusu potencijalnih posvojitelja, to mogu biti hrvatski državljani (iznimno i stranci) bračni i izvanbračni drugovi zajednički, jedan bračni ili izvanbračni drug ako je drugi bračni ili izvanbračni drug roditelj ili posvojitelj djeteta, jedan bračni ili izvanbračni drug uz pristanak drugoga te samci (osobe koje nisu u braku ili u izvanbračnoj zajednici) (čl. 185. i 186. ObZ-a; Hrabar, 2021b, Hrabar, 2019; Hrabar i Korać Graovac, 2019). Analizirajući aktivnu adoptivnu sposobnost, ObZ ne navodi životne partnere kao osobe koje mogu posvojiti dijete. Jedini kriteriji zasnivanja posvojenja jest najbolji interes djeteta (koji podrazumijeva ostvarenje temeljnih prava zajamčenih KPD-om) te procjena osobina potencijalnoga posvojitelja. Pri tome, bez obzira na pravo svake države da određuje uvjete pod kojim se dopušta zasnivanje posvojenja, oni ne smiju biti diskriminatorni (Rešetar, 2022), što znači da ni diskrecijska sloboda države u regulaciji posvojenja nije neograničena. Međutim, uzimajući u obzir činjenicu da samac može posvojiti dijete, koji mora udovoljavati pretpostavkama za posvojenje kako je ranije navedeno, to ne isključuje mogućnost (jedностранog) posvojenja od osobe homoseksualne orijentacije, koja uostalom ne mora ni biti poznata stručnjacima koji rade na području posvojenja.

## **Partnerska skrb kao pandan posvojenju**

Premda je prethodno upozoreno na nemogućnost posvojenja od životnih partnera, ŽŽPOIS-om iz 2014. godine uveden je institut partnerske skrbi. Partnerska skrb definira se kao oblik skrbi za maloljetno dijete koju može pružiti životni partner nakon smrti životnoga partnera djetetova roditelja, a iznimno i za života životnoga partnera roditelja djeteta ako drugi roditelj nije poznat ili mu je oduzeta roditeljska skrb zbog zlostavljanja djeteta (čl. 44. ŽŽPOIS-a). Generalno, riječ je o institutu sličnom posvojenju, i to nepotpunom posvojenju (premda u hrvatskom obiteljskom zakonodavstvu postoji samo jedinstveni oblik potpunoga posvojenja), pri čemu odluku o partnerskoj skrbi (kao obliku svojevrsnoga nepotpunog posvojenja) donosi sud, a ne Hrvatski zavod za socijalni rad (Korać Graovac, 2021; Hrabar i Korać Graovac, 2019).

Uvođenje instituta partnerske skrbi može se povezati i s činjenicom da kada je dijete dionik stabilne veze osoba homoseksualne orijentacije, gotovo je nemoguće zabraniti formalizaciju te veze samo zbog seksualne orijentacije (Rodean, 2014),

u ovom slučaju nakon smrti životnoga partnera roditelja ili nastupom drugih okolnosti koje opravdavaju imenovanje partnera skrbnika i za života životnoga partnera roditelja. Nedvojbeno, imenovanjem partnera skrbnika maloljetnom djetetu osigurava se kontinuitet roditeljske skrbi i obiteljskog okruženja. Prilikom imenovanja partnera skrbnika, u oba slučaja mora se raditi o maloljetnom djetetu te imenovanje partnera skrbnika mora biti u skladu s najboljim interesom djeteta, uz ostale posebne uvjete (čl. 45. ZŽPOIS-a; Korać Graovac, 2021; Hrabar i Korać Graovac, 2019).

Odlukom o imenovanju, partner skrbnik stječe roditeljsku skrb nad djetetom, odnosno sva prava i obveze koja iz toga proizlaze (Rešetar, 2022). Drugim riječima, zasnivanjem partnerske skrbi nastaje odnos roditelj – dijete između partnera skrbnika te djeteta i njegovih potomaka (čl. 47. i 48. ZŽPOIS-a). To onda znači supsidijarnu primjenu odredbi ObZ-a vezanih uz odnose roditelja i djece. Odlika partnerske skrbi jest i mogućnost njezina prestanka po prijedlogu Hrvatskog zavoda za socijalni rad, sporazumom partnera skrbnika i djeteta ili zahtjevom jednog od njih te prijedlogom roditelja kojemu je vraćeno pravo na roditeljsku skrb (čl. 49. st. 1. ZŽPOIS-a).

Od sredine 2015. godine, kada je prvi put dodijeljena partnerska skrb, do polovine 2022. godine bilo je ukupno 13 odluka o partnerskoj skrbi za djecu, iz čega proizlazi da se godišnje, u prosjeku, donose dvije odluke o partnerskoj skrbi (Novilist.hr, 2022). Premda vezano uz specifične okolnosti, ovakvim pravnim uređenjem proizlazi da životni partneri, *de facto*, uživaju mogućnost posebnog oblika posvojenja. Ipak, ne treba zanemariti činjenicu da je partnerska skrb raskidiva, za razliku od posvojenja, koje ima odliku neraskidivosti, a što bi se zasigurno moglo istaknuti kao nedostatak instituta partnerske skrbi u odnosu na interese djeteta.

## **SUDSKA PRAKSA ESLJP-a**

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ESLJP je u nekoliko predmeta odlučivao o posvojenju od osoba homoseksualne orijentacije u kontekstu diskriminacije u vezi s pravima na poštivanje obiteljskoga života. Obiteljski život iz čl. 8. EKLJP-a nema jedinstvenu definiciju, a obuhvaća različite životne situacije u kojima je ključno postojanje bliskih osobnih odnosa. Točnije, uz formalne veze, obiteljski život obuhvaća i potencijalne obiteljske odnose ili pak one odnose kod kojih je naglasak više na društvenim negoli na biološkim odnosima. Stoga se kao jedna od pozitivnih obveza u kontekstu prava na poštivanje obiteljskoga života ističe i donošenje propisa radi učinkovite provedbe prava (de Vries, 2018; Harris i sur., 2014), dok svaka mjera kojom se intervenira u obiteljski život mora biti zakonita, legitimna i nužna (Hirvelä i Heikkilä, 2022).

Prije svega, važno je istaknuti kako zajednički život istospolnih partnera također potpada pod čl. 8. EKLJP-a (Melehi, 2014; Batistić Kos, 2012), iz čega proizlazi pravo na ostvarivanje svih sadržaja obiteljskoga života bez diskriminacije, što je izrijekom određeno čl. 14. EKLJP-a. Odredba čl. 14. akcesorne je naravi i uvijek se primjenjuje uz druge odredbe EKLJP-a, odnosno prava zajamčena njome (Gerards, 2018; Rodean, 2014).

Četiri su recentna predmeta u kojima je ESLJP odlučivao o posvojenju od osoba homoseksualne orijentacije, a koji su bili vezani uz posvojenje od samaca homoseksualne orijentacije u predmetima Fretté protiv Francuske (zahtjev br. 36515/97, presuda ESLJP-a od 26. veljače 2002.) i E. B. protiv Francuske (zahtjev br. 43546/02, presuda ESLJP-a od 22. siječnja 2008.), posvojenje od strane drugog istospolnog *de facto* partnera u predmetu X i drugi protiv Austrije (zahtjev br. 19010/07, presuda ESLJP-a od 19. veljače 2013.) te zajedničko posvojenje registriranih istospolnih partnera u predmetu Gas i Dubois protiv Francuske (zahtjev br. 25951/07, presuda ESLJP-a od 15. ožujka 2012.). Zaključci u navedenim predmetima predstavljaju svojevrsnu smjernicu za regulaciju ove problematike u hrvatskom obiteljskom zakonodavstvu, koje još uvijek nema jasno pravno određenje o tom pitanju.

ESLJP jasno ističe važnost slobodne procjene države u regulaciji pojedinih pitanja, a koja podrazumijeva prilagodbu regulacije određenih pitanja potrebama društvene zajednice (Jakovac-Lozić i Radina, 2024). Ono se osobito ističe u odnosu na posvojenje od osoba homoseksualne orijentacije. U tom smislu ESLJP ne nameće konačna rješenja nacionalnim zakonodavcima, no to ne isključuje njegovo pravo ispitivanja usklađenosti navedenih rješenja s EKLJP-om (para. 41. Fretté protiv Francuske). Radi se o načelu supsidijarnosti, prema kojemu su države dužne osigurati prava i slobode, dok ESLJP ima nadzornu ulogu u tome (Bracken, 2023). U kontekstu posvojenja od osoba homoseksualne orijentacije, diskriminatorno postupanje postojalo bi kad uskrata te mogućnosti ne bi bila objektivno i razumno opravdana, pri čemu diskriminatorno postupanje u vezi sa seksualnom orijentacijom iziskuje posebno opravdane razloge. Radi se o uskom polju slobodne procjene, pa svaka poduzeta mjera mora biti nužna i prikladna postizanju cilja (para. 91. E.B. protiv Francuske; para. 139. i 140. X i drugi protiv Austrije; Shannon i sur., 2013).

Ako država nacionalnim zakonodavstvom ne navodi bitne razloge uskrate mogućnosti posvojenja osobama homoseksualne orijentacije, kao što je zaštita tradicionalne obitelji ili interesa djeteta, nadležna tijela ne mogu ispitati bi li predmetno posvojenje bilo u interesu djeteta (para. 152. X i drugi protiv Austrije). ESLJP je utvrdio da diskriminatorno postupanje postoji u slučaju kada je posvojenje omogućeno heteroseksualnim, ali ne i homoseksualnim izvanbračnim *de facto* partneri-

ma (para. 153. X i drugi protiv Austrije; Jakovac-Lozić i Radina, 2024; Bracken, 2021; Lucić, 2020). Stoga, postojanje diskriminatornoga postupanja ovisi o sličnim i usporedivim situacijama. Dakako, ne treba zanemariti da EKLJP predstavlja "živi" mehanizam koji prati društvena kretanja i promjene, a koji je potrebno tumačiti u svjetlu suvremenih kretanja (para. 92. Fretté protiv Francuske; para. 34. X i drugi protiv Austrije; Letsas, 2013).

Premda je u predmetima vezanim uz posvojenje od osoba homoseksualne orijentacije ESLJP primarno usmjeren analizi položaja potencijalnih posvojitelja homoseksualne orijentacije, u svakom od navedenih slučajeva osvrće se i na najbolji interes djeteta. Posebno se ističe stajalište ESLJP-a prema kojem najbolji interes djeteta, ovisno o okolnostima slučaja, može nadjačati interese drugih osoba, u ovom slučaju potencijalnih posvojitelja. Ističe se i zaključak prema kojemu je svrha posvojenja omogućiti djetetu obitelj, a ne dijete obitelji (Jakovac-Lozić i Radina, 2024; Jakovac-Lozić, 2021; O'Halloran, 2018), što znači da država kroz nacionalno zakonodavstvo propisuje uvjete pod kojima će se odabrati najprikladniji potencijalni posvojitelji (para. 42. Fretté protiv Francuske). Osim toga, ESLJP se referira na ključne međunarodne dokumente vezane uz prava djece i posvojenje, dok je u kontekstu najboljeg interesa djeteta važno i stajalište prema kojem je zabrana, odnosno ograničenje posvojenja od osoba homoseksualne orijentacije, moguće samo ako je u skladu s najboljim interesom djeteta (para. 146. X i drugi protiv Austrije), potvrđujući tako usmjerenost posvojenja isključivo prema djetetu, a ne prema potencijalnim posvojiteljima.

## **ODLUKA VUS-a – POČETAK PROMJENA?**

U skladu s prijašnjom analizom, aktivna adoptivna sposobnost u hrvatskom obiteljskom zakonodavstvu ne obuhvaća i životne partnere. Premda je odluka VUS-a iz 2022. godine medijski okarakterizirana kao "revolucionarna" odluka (Jutarnji.hr, 2022; Vecernji.hr, 2022; 24sata.hr, 2022), ovom odlukom životnim partnerima nije dana mogućnost posvojenja djece (para. 4. presude VUS-a). Uzimajući u obzir kompleksnost ove teme, u nastavku se analizira argumentacija VUS-a i zakonodavna (ne)usklađenost, pravni učinci odluke te komparativan prikaz rješenja ove problematike kroz tzv. "slovenski" primjer.

### **Argumentacija VUS-a i zakonodavna (ne)usklađenost**

Odluka VUS-a u vezi s posvojenjem djece od životnih partnera bila je potaknuta pokretanjem upravnoga spora protiv rješenja upravnoga suda kojim je utvrđena mogućnost životnih partnera da pristupe postupku procjene podobnosti i prikladnosti za posvojenje. U postupku pred VUS-om, tužitelji su bili

životni partneri kojima je prijašnjim odlukama uskraćena mogućnost pristupa postupku procjene prikladnosti i podobnosti za posvojenje djeteta, dok je tuženik bilo Ministarstvo rada, mirovinskoga sustava, obitelji i socijalne politike Republike Hrvatske (para. 1-2. presude VUS-a).

U svojoj argumentaciji tužitelji su se primarno pozivali na praksu ESLJP-a, i to povredu čl. 14. u vezi s čl. 8. EKLJP-a, aludirajući pri tome na *erga omnes* učinak njegovih odluka, ističući diskriminatorno postupanje u kontekstu seksualne orijentacije te mogućnost ograničenja određenih konvencijskih prava samo ako to opravdavaju razlozi zaštite javnog interesa (para. 15-26. presude VUS-a). S druge strane, tuženik je isticao kako prema pozitivnopravnim propisima Republike Hrvatske posvojenje od životnih partnera nije moguće (što proizlazi iz odredbe čl. 185. ObZ-a), pozivajući se pri tome i na zaštitu interesa djeteta te činjenicu da Republika Hrvatska nije potpisnica EKOPD-a (para. 12., 13. i 28. presude VUS-a).

Slijedom prijašnjih odluka ESLJP-a, VUS je utvrdio diskriminatorno postupanje prema životnim partnerima, a koje bi bilo protivno i ustavnim odredbama (čl. 3. kao vrednotama ustavnog poretka Republike Hrvatske te čl. 14. kojim se zabranjuje svaki oblik diskriminacije) (Smerdel, 2020; Smerdel i Sokol, 2009). Kako navodi, uskrata mogućnosti pristupa postupku procjene prikladnosti i podobnosti za posvojenje značila bi različit tretman osoba homoseksualne orijentacije, utemeljen isključivo na seksualnoj orijentaciji. (para. 30. presude VUS-a).

Onemogućavanje posvojenja od životnih partnera (bez opravdanih razloga) vodi ka povredi prava jednakosti te diskriminaciji. Niz je međunarodnih dokumenata koji jamče pravo na jednakost i zabranu diskriminacije, pa se tako, između ostaloga, ističu Opća deklaracija o ljudskim pravima (čl. 2.) (*Narodne novine – Međunarodni ugovori*, 12/2009), EKLJP (čl. 14.) te Međunarodni pakt o ekonomskim, socijalnim i kulturnim pravima (čl. 2.) (Službeni list SFRJ, 7/1971, *Narodne novine – Međunarodni ugovori*, 12/1993) (vidjeti i: McCrudden i Kountourou, 2007). Osobito se ističe legislativa Europske unije – Ugovor o Europskoj uniji (čl. 1.) (Službeni list Europske unije, C 202/13 od 7. lipnja 2016.) te Povelja Europske unije o temeljnim pravima (čl. 21.) (Službeni list Europske unije, C 202/389 od 7. lipnja 2016.), kojima se jamče jednakost i zaštita od diskriminacije. Republika Hrvatska obvezna je postupati u skladu s odredbama navedenih međunarodnih dokumenata, jer prema monističkom načelu međunarodni ugovori čine dio unutarnjega pravnog poretka Republike Hrvatske (čl. 141.; Bakmaz, 2019; Smerdel i Sokol, 2009) te obvezu njihove primjene u nacionalnom zakonodavstvu.

Govoreći o hrvatskom pravnom okviru, jednakost i zabrana diskriminacije uređeni su Zakonom o suzbijanju diskriminacije (*Narodne novine*, 85/2008, 112/2012; u nastavku: ZSD) te Zakonom o ravnopravnosti spolova (*Narodne novine*, 82/2008, 69/2017; u nastavku: ZRS), kao organskim zakonima kojima se uređuju temeljna ljudska prava. Uzme li se u obzir činjenica da životno partnerstvo stvara učinke istovjetne braku, proizlazi da su u odnosu na posvojenje izravno diskriminirani, jer se nalaze u nepovoljnijem položaju (u usporedivoj situaciji) u odnosu na bračne i izvanbračne drugove (čl. 2. st. 1. ZSD-a). Ipak, ne treba zanemariti ni činjenicu da ZSD ne smatra diskriminatornim postupanja u vezi s regulacijom prava i obveza iz ObZ-a, pri čemu ograničenja prava moraju biti primjerena i nužna (čl. 9. st. 2. t. 10. ZSD-a). Jednako tako je i ESLJP kroz svoju praksu potvrdio da opravdanje diskriminatornoga postupanja mora biti objektivno i razumno da bi se postigao legitiman cilj (Radačić, 2008). U kontekstu ravnopravnosti i zabrane diskriminacije, ističe se i odredba ZSR-a (čl. 6. st. 3.) kojim se izrijeком zabranjuje diskriminacija na temelju spolne orijentacije.

Navodeći jasnu razliku između postupka procjene prikladnosti i podobnosti za posvojenje od postupka zasnivanja posvojenja, VUS ističe kako ne postoje razlozi zbog zaštite javnog interesa, odnosno legitimnoga cilja zaštite interesa djeteta. Ispravno VUS navodi da se interes konkretnoga djeteta da bude posvojeno utvrđuje u postupku zasnivanja posvojenja i prilikom odabira najprikladnijih potencijalnih posvojitelja (ranije upisanih u Registar potencijalnih posvojitelja), pri čemu postupak procjene prikladnosti i podobnosti potencijalnih posvojitelja ni na koji način ne utječe na interese djeteta, koji se utvrđuju tek u postupku zasnivanja posvojenja (kada su utvrđene sve relevantne činjenice) (para. 31-32. presude VUS-a). Tomu treba dodati pravo djeteta da izrazi svoje mišljenje o posvojenju, odnosno pravno obvezujući pristanak djeteta starijeg od 12 godina na posvojenje (čl. 191. ObZ-a; Rešetar, 2022; Jakovac-Lozić, 2021).

Utvrđivanje podobnosti i prikladnosti za posvojenje potencijalnih posvojitelja uređeno je Pravilnikom o podobnosti i prikladnosti za posvojenje (*Narodne novine*, 56/2025). Podobnost podrazumijeva pravne pretpostavke na strani potencijalnih posvojitelja u skladu s ObZ-om, dok se prikladnost odnosi na fizičke, psihičke i socijalne pretpostavke koje mora imati potencijalni posvojitelj u odnosu na osobine i potrebe djeteta (čl. 3. Pravilnika o podobnosti i prikladnosti za posvojenje). Radi se o sveobuhvatnom postupku u kojem sudjeluju pravnik, socijalni radnik i psiholog. Uz podnošenje odgovarajućih dokaza uz zahtjev za posvojenje, postupak procje-

ne podobnosti i prikladnosti podrazumijeva provedbu intervjua s podnositeljem zahtjeva, sveobuhvatnu obiteljsku procjenu, procjenu roditeljskih sposobnosti, posjet na adresi stanovanja, uvid u podnesenu dokumentaciju te razgovor s bližim srodnicima i prijateljima, na temelju čega se donosi stručno mišljenje o podobnosti i prikladnosti za posvojenje, a što je pak osnova za upis u Registar potencijalnih posvojitelja (čl. 5., čl. 7. – 9. Pravilnika o podobnosti i prikladnosti za posvojenje; Rešetar, 2022; Jakovac-Lozić, 2021; Hrabar, 2019). Samim time, društveni stavovi vezani uz posvojenje, u ovom slučaju osoba homoseksualne orijentacije, odnosno životnih partnera, ne mogu odrediti nečije roditeljske vještine, nego se to čini procjenom stručnjaka u postupku zasnivanja posvojenja. Dakako, u tom su smislu važni stavovi stručnjaka uključenih u postupak posvojenja, jer oni donose i konačnu odluku, a koja se temelji na procjeni prikladnosti određene osobe za posvojenje (Molina i Alarcón, 2015).

Naposlijetku, onemogućavanje životnih partnera da pristupe postupku procjene prikladnosti i podobnosti radi posvojenja u kontekstu sudske prakse ESLJP-a rezultiralo bi povredom čl. 14. u vezi s čl. 8. EKLJP-a (para. 33. presude VUS-a). VUS se ispravno poziva na praksu ESLJP-a na području posvojenja od osoba homoseksualne orijentacije, jer njegove presude djeluju *erga omnes*, a na što bi države članice Vijeća Europe trebale odgovoriti kroz prilagodbu svojega zakonodavstva.

## Pravni učinak odluke VUS-a

Premda odluka VUS-a životnim partnerima jamči pravo pristupiti postupku procjene podobnosti i prikladnosti za posvojenje, njome nije do kraja riješeno ovo pitanje. Naime, na temelju prijave namjere posvojenja i zahtjeva za ocjenu podobnosti i prikladnosti za posvojenje Hrvatski zavod za socijalni rad najprije ispituje zakonske pretpostavke za posvojenje, a koje se odnose na dob, status, državljanstvo te zabrane za posvojenje (čl. 204. ObZ-a; Rešetar, 2022). Nakon što bi se utvrdio status životnih partnera, kojima ObZ-om nije dana mogućnost posvojenja, ostaje otvoreno pitanje ima li ova odluka, koja dopušta životnim partnerima pristup postupku procjene podobnosti i prikladnosti za posvojenje, smisla, jer već na temelju svojega statusa životni partneri ne mogu biti upisani u Registar potencijalnih posvojitelja, a samim time niti postati potencijalni posvojitelji.

Dakle, VUS je samo argumentirao razloge zbog kojih životnim partnerima treba omogućiti pristup postupku procjene podobnosti i prikladnosti za posvojenje (Guštin, 2022), kao svojevrsnom prethodnom postupku, bez preciznog odgovora treba li im dati i mogućnost zasnivanja posvojenja. Za razliku od predmeta *Fretté protiv Francuske*, u kojem je ESLJP primi-

jenio načelo opreza (engl. *precautionary principle*) pozivajući se na nedostatak znanstvene rasprave o temi posvojenja od osoba homoseksualne orijentacije, a ostavljajući mogućnost regulacije toga pitanja svakoj pojedinoj državi, u ovom predmetu već i pozivanje na praksu ESLJP-a odmiče od neodređenih stajališta (o načelu opreza vidjeti više: Willoughby Stone, 2003). Ipak, drži li se VUS dosljedno prakse ESLJP-a, koja djeluje *erga omnes*, ne treba ispustiti iz vida da njegova odluka u predmetu X i drugi protiv Austrije jasno pokazuju da mogućnost posvojenja za heteroseksualne *de facto* znači isto i za homoseksualne *de facto* partnere (Lucić, 2020; Melehi, 2014). Prema važećem hrvatskom zakonodavstvu, izvanbračni drugovi mogu biti posvojitelji. Međutim, u kontekstu nediskriminacije, ne treba zanemariti ni odluku Ustavnog suda Republike Hrvatske iz 2020. godine (Odluka i Rješenje Ustavnog suda Republike Hrvatske, U-I-144/2019, U-I-507/2019, U-I-637/2019, U-I-858/2019, U-I-873/2019, U-I-933/2019, U-I-952/2019, U-I-1107/2019 od 29. siječnja 2020.), kojom je životnim partnerima omogućeno udomljavanje djece. U širem smislu, ovisno o ustavnosudskoj interpretaciji, ova bi odluka bila primjenjiva i u odnosu na zabranu diskriminacije životnih partnera kao potencijalnih posvojitelja.

Antidiskriminacijsko zakonodavstvo, *de iure*, dopušta određena odstupanja od zabrane diskriminacije, između ostaloga i u odnosu na obiteljska postupanja, no ona trebaju biti posebno opravdana. U konačnici, i ESLJP kroz svoju praksu, a što se posebno odnosi na (ne)mogućnost posvojenja od osoba homoseksualne orijentacije, potvrđuje slobodu procjene država u uređenju toga pitanja. Ipak, i ta sloboda procjene i regulacije ovisi o određenim čimbenicima, kao što je priroda prava i njegova važnost za pojedinca, pri čemu je sloboda procjene uža kada je riječ o zabrani diskriminacije, pitanjima intimne prirode te o pitanjima o kojima postoji konsenzus (Radačić, 2010). Neovisno o stavovima vezanim uz (ne)mogućnost posvojenja od životnih partnera, u hrvatskom zakonodavstvu još uvijek ne postoji opravdano i objektivno opravdanje koje bi vodilo legitimnom cilju ograničenja mogućnosti posvojenja od životnih partnera, odnosno osoba homoseksualne orijentacije, zbog čega proizlazi da je hrvatsko zakonodavstvo u suprotnosti s obvezama iz međunarodnih dokumenata, prakse ESLJP-a te vlastitim nacionalnim zakonodavstvom.

## "Slovenski model" uvođenja posvojenja od životnih partnera

Neposredno nakon odluke VUS-a o pravu životnih partnera da pristupe postupku procjene podobnosti i prikladnosti za posvojenje, Ustavni sud Republike Slovenije u lipnju 2022. donio je odluku o neustavnosti obiteljskoga zakonodavstva u vezi s nemogućnosti posvojenja životnih partnera (odluka Us-

tavnog suda Republike Slovenije U-I-486/20-20, Up-572/18-36 i U-I-91/21-19, Up-675/19-32 od 16. lipnja 2022.). Odluku Ustavnoga suda Republike Slovenije u vezi s ovom tematikom nužno je istaknuti zato što je njome utvrđena neustavnost propisa, a što je pak označilo početak izmjene zakonodavstva i uvođenje mogućnosti posvojenja od životnih partnera (Maček, 2022; Guštin, 2022).

U odnosu na mogućnost posvojenja životnih partnera, zahtjev životnih partnerica koje su živjele u registriranoj životnoj zajednici za zajedničkim posvojenjem odbijen je jer je ta mogućnost bila predviđena samo za bračne drugove, zbog čega su podnijele zahtjev za ocjenu ustavnosti Obiteljskoga zakona (slo. *Družinski zakonik*) (Uradni list Republike Slovenije, 15/2017, 21/2018, 22/2019, 67/2019, 200/2020, 94/2022, 5/2023, 34/2024; u nastavku: DZ) (para. 1-11.). Prije svega, utvrđeno je diskriminatorno postupanje prema osobama homoseksualne orijentacije onemogućavanjem sklapanja braka, uz opravdanje zaštite tradicionalne (heteroseksualne) obitelji (para. 30.). Međutim, Ustavni sud Republike Slovenije zauzeo je stajalište prema kojemu argument tradicije ne može opravdati diskriminaciju (para. 43-44.). U tom smislu nije zabranjena zaštita obitelji na ustavnoj razini, no uskrata mogućnosti sklapanja braka dviju osoba homoseksualne orijentacije nije prikladna za postizanje navedenoga cilja. Ono polazi od činjenice da brak nije uvjet zasnivanja obitelji, da mogućnost sklapanja braka dviju osoba homoseksualne orijentacije ni na koji način ne utječe na život tradicionalnoga naroda te da su u društvu prisutne osobe homoseksualne orijentacije (para. 45.). Ipak, kroz svoju je praksu ESLJP zauzeo stajalište prema kojemu države nisu dužne omogućiti sklapanje braka istospolnim partnerima (para. 66. Gas i Dubois protiv Francuske; Jakovac-Lozić i Radina, 2024). *De facto*, životni partneri imali su mogućnost tzv. jednostranog posvojenja, što je značilo da je životni partner u registriranoj ili neformalnoj životnoj zajednici mogao posvojiti dijete, bilo tuđe ili dijete svojega partnera. Iako nisu zajednički mogli posvojiti u Sloveniji, postojala je i mogućnost posvojenja u drugoj državi, a što bi u tom slučaju rezultiralo priznanjem odnosa roditelj – dijete (para. 66.; Novak, 2022; Novak, 2019; Kraljić, 2018; Kogovšek Šalamon, 2010).

Uz pozivanje na recentne međunarodne ugovore i praksu ESLJP-a, Ustavni sud Republike Slovenije više puta je istaknuo kako zaštita tradicionalne obitelji ne smije biti razlog isključenja mogućnosti zajedničkoga posvojenja od životnih partnera. Jednostrana posvojenja otprije su bila dio pravnoga sustava Slovenije, a koja nisu rezultirala stvaranjem tradicionalne obitelji, pa samim time nema ni opravdanja za diskriminaciju (para. 67.). Nadalje, upozoreno je na nekonzistentno tumačenje, prema kojemu je najbolji interes djeteta ži-

vjeti s roditeljima heteroseksualne orijentacije. Takvo shvaćanje polazi od činjenica da je osoba homoseksualne orijentacije mogla samostalno posvojiti dijete, a ako bi sklopila životno partnerstvo, ne bi imala tu mogućnost (para. 68.). Zbog toga Ustavni sud Republike Slovenije navodi kako nema dovoljno opravdanih razloga za uskratnu mogućnosti zajedničkoga posvojenja životnih partnera, pri čemu je ovakvo postupanje u suprotnosti sa svrhom posvojenja. Naime, svrha je posvojenja osigurati stabilno okruženje za dijete i njegov razvoj, a što je više potencijalnih posvojitelja, lakše se odabire onaj najprikladniji za dijete. U praksi, utvrđivanje najboljeg interesa djeteta utvrđuje se u svakom pojedinačnom slučaju procjenom podobnosti i prikladnosti potencijalnih posvojitelja od nadležnog tijela socijalne skrbi, prosudbom pri odabiru najprikladnijega potencijalnog posvojitelja po prijedlogu nadležnoga tijela socijalne skrbi te, naposljetku, odlukom suda o posvojenju u konkretnom slučaju, pri čemu se u obzir uzimaju osobine djeteta, kandidata i slično, što znači da nema automatizma posvojenja (para. 68., 70-71.; Drnovšek, 2022). U tom smislu, tradicionalna obitelj nije jedina koja pruža i djeluje u skladu s najboljim interesom djeteta (Drnovšek, 2022).

Slovenski Ustavni sud utvrdio je prekomjerno zadiranje u prava osoba homoseksualne orijentacije te je odredio zakonodavcu rok od šest mjeseci za izmjenu neustavnih zakonskih odredbi. Ujedno je istaknuto i da zakonodavac određuje način zaštite djece bez odgovarajuće roditeljske skrbi, a čime se ne smije povrijediti načelo jednakosti pred zakonom (para. 72-74.). Budući da su izmjene i dopune obiteljskoga zakonodavstva rezultirale ukidanjem odredbe o različitosti spolova za postojanje braka, čime je i osobama istoga spola omogućeno sklapanje braka (čl. 22. DZ-a; Weber, 2024), a kako bračni drugovi mogu posvojiti zajednički (čl. 213. DZ-a), omogućeno im je i zajedničko posvojenje. Za razliku od odluke VUS-a, slovenski Ustavni sud odredio je jasnu uputu zakonodavcu, koja je rezultirala zakonskim određenjem mogućnosti životnih partnera na posvojenje, ne ispuštajući pri tome iz vida najbolji interes djeteta.

## ZAKLJUČAK

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Neovisno o kategoriji potencijalnih posvojitelja, najbolji interes djeteta kao jedino i najvažnije razmatranje u ovom slučaju označuje mogućnost zasnivanje posvojenja samo ako se time štite interesi djeteta, a ne i interesi potencijalnih posvojitelja. Međunarodni dokumenti i praksa ESLJP-a ostavljaju široku slobodu državama u regulaciji posvojenja te pretpostavki njegova zasnivanja. Na taj se način omogućuje i zaštita tradicionalne obitelji kao najčešćeg argumenta uskrate mogućnosti posvojenja od osoba homoseksualne orijentacije.

Unatoč širokoj slobodi, važno je istaknuti i zabranu bilo kojeg oblika diskriminacije temeljene na seksualnoj orijentaciji. ESLJP potvrđuje kako mogućnost posvojenja od životnih partnera, kao i općenito osoba homoseksualne orijentacije, znači osiguranje obiteljskog okruženja za dijete, a koje se tumači u skladu s dinamičnim shvaćanjem obitelji.

Hrvatsko obiteljsko zakonodavstvo još uvijek ne uređuje mogućnost posvojenja djece od (istospolnih) životnih partnera. Tome nije pridonijela ni odluka VUS-a iz 2022. godine, kojom su zadržali *status quo* jer mogu pristupiti samo prvom dijelu postupka posvojenja – procjeni prikladnosti i podobnosti. Pozitivan ishod toga postupka ne može rezultirati zasnivanjem posvojenja s obzirom na to da ObZ ne navodi izričekom životne partnere kao potencijalne posvojitelje. Doima se da bi mogućnost posvojenja od osoba homoseksualne orijentacije, odnosno životnih partnera, rezultirala "automatskim" zasnivanjem posvojenja, no to ovisi o pozitivnom ishodu procjene podobnosti i prikladnosti za posvojenje te, u konačnici, o mišljenju ili pristanku djeteta.

Premda je legitiman cilj hrvatskoga zakonodavstva zaštita tradicionalne (heteroseksualne) obitelji, ono prije svega treba biti konzistentno i jednako u odnosu na sve. Navedenu nekonzistentnost uvjetuje institut partnerske skrbi, koji životnim partnerima omogućuje svojevrsan oblik (nepotpunog) posvojenja. Proizlazi da se s jedne strane zagovaraju argumenti protiv mogućnosti posvojenja od životnih partnera, dok im se s druge strane u iznimnim situacijama dopušta nepravilni oblik posvojenja. Premda su učinci partnerske skrbi gotovo istovjetni posvojenju, postupak njegova zasnivanja znatno je drugačiji od uobičajenoga postupka posvojenja, koji bez postupka procjene podobnosti i prikladnosti stvara dojam neformalnijega pristupa u zaštiti prava djeteta na život u obitelji.

Uzme li se u obzir i mogućnost posvojenja samaca, čija eventualna homoseksualnost ne bi smjela biti odrednica posvojenja, dodatno se potvrđuje nekonzistentnost u regulaciji ove problematike te svojevrsna diskriminacija. Pri tome diskriminatorno postupanje proizlazi i iz nepoštivanja odredbi međunarodnih dokumenata vezanih uz zabranu diskriminacije, a koji čine dio pravnoga poretka Republike Hrvatske. Uz to, ističe se i hrvatsko antidiskriminacijsko zakonodavstvo, koje se ne primjenjuje dosljedno u odnosu na (ne)mogućnost posvojenja od životnih partnera. U praktičnom smislu, uskrata mogućnosti posvojenja od životnih partnera mogla bi se tumačiti kao smanjenje kruga potencijalnih posvojitelja, koji bi – neovisno o seksualnoj orijentaciji – djetetu mogli pružiti stabilno i trajno obiteljsko okruženje.

Odluka VUS-a mogla bi rezultirati s nekoliko potencijalnih ishoda u budućnosti. Generalno, društvena klima i stavovi zakonodavca mogu rezultirati regulacijom mogućnosti po-

svojenja od životnih partnera u ObZ-u, a što bi bila obveza i prema odredbama analiziranih međunarodnih dokumenata i nacionalnog zakonodavstva u vezi sa sprječavanjem diskriminacije. Nadalje, ne isključuje se ni mogućnost ispitivanja ustavnosti ObZ-a od Ustavnog suda Republike Hrvatske, koji može naložiti zakonske izmjene zbog nekonzistentnosti (kao što je to bio slučaj u Sloveniji). Dakako, ne treba isključiti ni neki novi slučaj uskrate posvojenja od životnih partnera, o kojem naposljetku može odlučivati ESLJP te svojom odlukom "nametnuti" regulaciju ovoga pitanja.

Premda se mogućnost posvojenja od životnih partnera treba voditi pravnom argumentacijom neovisno o društvenim stavovima, što uključuje i odredbe antidiskriminacijskoga zakonodavstva, govoreći o Hrvatskoj kao državi koja još uvijek ne omogućuje ovaj oblik posvojenja, daljnja istraživanja bilo bi korisno usmjeriti istraživanju društvenih stavova, kao i komparativnoj analizi, iz kojih bi proizašle (dodatne) smjernice za moguće rješenje ove problematike u hrvatskom pravnom sustavu.

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Pravilnik o elementima koji se odnose na podobnost i prikladnost za posvojenje, sadržaju stručnog mišljenja o podobnosti i prikladnosti za posvojenje, metodama utvrđivanja podobnosti i prikladnosti, sadržaju izvješća o djetetu, vođenju registra o potencijalnim posvojiteljima te načinu vođenja registra o posvojenjima. *Narodne novine*, 56/2025.

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### Sudska praksa ESLJP-a

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### Sudska praksa Ustavnog suda Republike Hrvatske

Odluka i Rješenje Ustavnog suda Republike Hrvatske, U-I-144/2019, U-I-507/2019, U-I-637/2019, U-I-858/2019, U-I-873/2019, U-I-933/2019, U-I-952/2019, U-I-1107/2019 od 29. siječnja 2020.

## Mrežni izvori

Istospolni partneri mogu ravnopravno pristupiti postupku po-svajanja djece: 'Ovo je veliki trenutak'. <https://www.vecernji.hr/vijesti/visoki-upravni-sud-donio-presudu-u-slucaju-pristupa-posvojenju-zivotnih-partnera-kozica-i-segote-1589621>

Ova brojka sve govori o tome koliko je u Hrvatskoj "lako" dobiti partnersku skrb za djecu. <https://www.novilist.hr/novosti/hrvatska/ova-brojka-sve-govori-o-tome-koliko-je-u-hrvatskoj-lako-dobiti-partnersku-skrb-za-djecu/>

Same-sex adoption. <https://www.equaldex.com/issue/adoption>

Sud donio povijesnu odluku: istospolne partnere više se ne smije diskriminirati kod posvajanja djece. <https://www.jutarnji.hr/vijesti/hrvatska/sud-donio-povijesnu-odluku-istospolne-part-nere-vise-se-nemije-diskriminirati-kod-posvajanja-djece-15-202514>

Visoki upravni sud otvorio vrata gay parovima da posvajaju djecu, presuda je presedan. <https://www.24sata.hr/news/pala-je-presuda-viso-kog-upravnog-suda-gay-parovi-mogu-u-evaluaciju-posvojitelja-838131>

## Adoption by Persons of Homosexual Orientation with Reference to the Republic of Croatia

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Adoption by persons of homosexual orientation is a current, but at the same time controversial topic. The European Court of Human Rights has, through its case law, confirmed the freedom of states to regulate this issue independently, subject

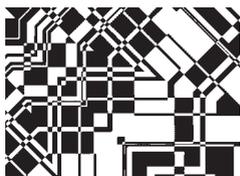
to the prohibition of discriminatory treatment. In the Republic of Croatia, life (same-sex) partners do not have the possibility of jointly adopting a child, with additional confusion arising from a decision of the High Administrative Court of the Republic of Croatia in 2022. Therefore, this paper aims to present the issue of adoption by persons of homosexual orientation with special reference to the (im)possibility of adoption by life partners in the Republic of Croatia, and to present the legal implications of the decision of the High Administrative Court of the Republic of Croatia from 2022. With the aforementioned decision, and considering the complexity of this topic, international treaties related to adoption, national Croatian family and anti-discrimination legislation, and recent decisions of the European Court of Human Rights are also analysed. Since the Constitutional Court of the Republic of Slovenia also decided on the possibility of adoption by same-sex partners in the same year, its significance is analysed as an example of the legal regulation of this issue.

Keywords: adoption, Family Law Act, the best interest of the child, persons of homosexual orientation, High Administrative Court of the Republic of Croatia



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# MEDIJACIJSKA ULOGA ISPITNE ANKSIOZNOSTI U ODNOSU IZMEĐU AUTOMATSKIH MISLI I ŠKOLSKOG USPJEHA UČENIKA OSNOVNE ŠKOLE

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Cilj ovog istraživanja bio je ispitati odnos automatskih misli tijekom učenja i školskog uspjeha, s naglaskom na medijacijskoj ulozi kognitivnog i fiziološkog aspekta ispitne anksioznosti. U istraživanju je sudjelovalo 256 učenika šestih i sedmih razreda osnovne škole (52,8 % učenica;  $M_{dob} = 12,80$  godina,  $SD_{dob} = 0,73$ ). Primijenjeni su validirani upitnici automatskih misli i ispitne anksioznosti te su prikupljeni podaci o *općem uspjehu* učenika i *procjeni zadovoljstva sobom kao učenikom*. Analizom traga utvrđen je pozitivan izravan efekt pozitivnih automatskih misli na učenikovo zadovoljstvo, dok su misli koje opisuju manjak motivacije i interesa za učenje pozitivno utjecale na zaključnu ocjenu. Misli koje odražavaju strah od neuspjeha pokazale su negativan izravan efekt na mjere školskog uspjeha, pri čemu je odnos djelomično posredovan fiziološkim znakovima ispitne anksioznosti. Dobiveni nalazi pridonose razumijevanju emocionalno-kognitivnih mehanizama školskoga funkcioniranja te upućuju na važnost njihove integracije u školske preventivne i intervencijske programe.

Ključne riječi: ispitna anksioznost, automatske misli, školski uspjeh, školska psihologija



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Pritisci unutar obrazovnoga sustava jedan su od najčešćih izvora svakodnevnoga stresa za djecu i adolescente. Istraživanja pokazuju da oko 8 % učenika navodi specifične strahove vezane uz školu, osobito strah od neuspjeha, rutinskog ispitivanja te roditeljskih reakcija na ocjene (Vulić-Prtorić i Lončarević, 2016), dok više od trećine učenika osjeća napetost već tijekom same pripreme za ispit (Pascoe i sur., 2020). U kontekstu sve većih društvenih očekivanja povezanih s akademskim dostignućima (Pinquart i Ebeling, 2020; Svjetska zdravstvena organizacija [SZO], 2024), učenici su izloženi sve gorem pritisku da postignu školski uspjeh. Strah od ispita, karakterističan za ispitnu anksioznost, osobito je izražen kod učenika suočenih s pretjerano visokim roditeljskim očekivanjima i naglašenom kritičnošću prema njihovu školskom uspjehu (Aydin, 2019).

U navedenom kontekstu, strah od neuspjeha, nemogućnosti prisjećanja naučenoga gradiva ili mogućeg razočaranja socijalne okoline mogu dovesti do doživljaja ispitne situacije kao prijeteće te rezultirati emocionalnom uznemirenošću i izraženom tjeskobom (Kozjak Mikić, 2021). Takve reakcije predstavljaju ključne značajke ispitne anksioznosti, višedimenzionalnoga konstrukta koji obuhvaća kognitivne i fiziološke odgovore povezane sa zabrinutosti zbog mogućega neuspjeha ili lošije izvedbe na ispitu (Cassady i Johnson, 2002). Ispitnu anksioznost karakteriziraju osjećaji straha i nelagode, fiziološke reakcije (poput pojačanoga znojenja ili ubrzanog rada srca), povećana napetost, zaboravljanje činjenica, osjećaj bespomoćnosti te interferirajuće misli koje otežavaju optimalno funkcioniranje u ispitnim situacijama (McDonald, 2001). Iako umjerena razina anksioznosti može djelovati poticajno, visoka razina anksioznosti često dovodi do smanjene izvedbe u odnosu na stvarne sposobnosti učenika (McDonald, 2001), čime se u konačnici negativno odražava na školski uspjeh.

Razina doživljene anksioznosti određena je subjektivnom procjenom ispitne situacije kao prijeteće ili štetne (Zeidner, 1998). U skladu s tim, Beckov kognitivni model disfunkcionalnoga ponašanja (engl. *Cognitive Model of Dysfunctional Behavior*, 2007) naglašava ulogu kognitivnih procesa u oblikovanju ponašajnih, emocionalnih i fizioloških reakcija na situaciju. S obzirom na važnost kognitivne interpretacije, automatske misli koje se javljaju tijekom ispitne situacije predstavljaju važan čimbenik u razumijevanju reakcija učenika na ispitnu situaciju te njihove izvedbe pri ispitivanju. Automatske misli definiraju se kao brze, evaluacijske misli o određenoj situaciji, koje se javljaju bez ulaganja kognitivnoga napora (Beck, 2007). Živčić-Bećirević (2003) izdvaja četiri tipa automatskih misli koje se učenicima javljaju tijekom učenja i/ili ispitivanja znanja, a koje odražavaju *strah od neuspjeha*, *strah od razočaranja roditelja* te *nedostatak motivacije i nezainteresiranost za učenje i gradivo* – od-

nosno negativne automatske misli – te *pozitivne automatske misli*. Negativne automatske misli, poput "Neću ništa znati na ispitu" ili "Razočarat ću svoje roditelje", često se nekritički prihvaćaju kao istinite te mogu biti temelj javljanja i održavanja psihopatoloških stanja, kao što je visoka anksioznost (Beck 2007; Kozjak Mikić, 2021). Istraživanja pokazuju da se negativne, disfunkcionalne misli učestalije javljaju kod učenika koji doživljavaju visoke razine ispitne anksioznosti (Živčić-Bećirević, 2003) te upozoravaju na povezanost učestalijega javljanja negativnih automatskih misli s nižim akademskim uspjehom (Diaz i sur., 2001; Živčić-Bećirević i Rački, 2006).

Dosadašnje interpretacije slabije akademske izvedbe visoko anksioznih učenika često su se temeljile na pretpostavci da brige, razmišljanja o neuspjehu i očekivanja negativnih posljedica tijekom ispita interferiraju s izvršnim funkcijama i zauzimaju ograničene kapacitete radnoga pamćenja potrebnih za uspješno rješavanje zadatka (Eysenck i sur., 2007). Međutim, naglasak se sve više stavlja na ulogu emocionalnih reakcija u razumijevanju motivacije, učenja i dostignuća (Pekrun, 2006). Model raspoloženja i ponašanja (engl. *Mood-Behavior Model*, Gendolla, 2000) pretpostavlja da se afektivna stanja – poput anksioznosti ili negativnog raspoloženja – odražavaju na procjenu zahtjeva zadatka i vlastitih sposobnosti za suočavanje s njima. U školskom kontekstu, emocionalno stanje koje proizlazi iz kognitivne interpretacije ispitne situacije može modulariti motivacijske procese koji određuju razinu uloženog napora za svladavanje ispita te na taj način djelovati posredno na uspjeh na ispitu, a posljedično i na školski uspjeh.

Uloge kognitivnih i emocionalnih individualnih čimbenika u objašnjenju dobrobiti i školskog uspjeha učenika mogu se dodatno sagledati u okviru Konceptualnog utilitarnog modela za upravljanje stresom i psihološkom dobrobiti (engl. *Conceptual utility model for Management of Stress and Psychological Wellbeing*, CMMSPW, de la Fuente i Martinez-Vicente, 2024). Model integrira individualne i kontekstualne čimbenike u objašnjenju psihološke dobrobiti, akademskoga stresa te uspjeha, razlikujući pritom regulatorne, neregulatorne i disregulatorne razine regulacije. Automatske misli za vrijeme učenja i pisanja ispita mogu se, pritom, promatrati kao ulazni kognitivni čimbenici koji oblikuju samoregulaciju u ispitnim situacijama, dok ispitna anksioznost predstavlja važan individualni procesni mehanizam kojim se kognitivni obrasci mogu odraziti na akademsko funkcioniranje. Školski uspjeh i zadovoljstvo vlastitim uspjehom mogu se smatrati ishodima regulatornih kapaciteta učenika te razine doživljene anksioznosti. Time se otvara mogućnost razmatranja složenijih mehanizma djelovanja negativnih automatskih misli. Osim što mogu imati izravan ometajući efekt na izvedbu, njihova povezanost s emocionalnim stanjima, poput anksioznosti ili straha, upućuje na mogućnost neizravna učinka na školski uspjeh.

Iako se školski uspjeh u prethodnim istraživanjima najčešće promatrao kroz postignute ocjene, koje čine vanjsku perspektivu školskog uspjeha, važno je uzeti u obzir i unutarnju perspektivu. Unutarnja perspektiva odnosi se na subjektivni doživljaj učenika, odnosno na njegovu procjenu zadovoljstva vlastitim školskim uspjehom (Kalajdžić i sur., 2015; Vulić-Prtorić i Lončarević, 2016). Dosadašnjim istraživanjima utvrđeno je kako se zadovoljnijim učenicima i studentima rjeđe javljaju negativne automatske misli tijekom učenja, u usporedbi s pozitivnim mislima. Istodobno, studenti s izraženijim simptomima ispitne anksioznosti često pokazuju niže razine zadovoljstva vlastitim akademskim postignućima (Mohorić, 2008; Živčić-Bećirević i Rački, 2006).

Unatoč tome što su Živčić-Bećirević i Rački (2006) prethodno proveli istraživanje usmjereno na ispitivanje odnosa između automatskih misli, ispitne anksioznosti i školskog uspjeha, suvremene društvene i obrazovne promjene upućuju na potrebu ponovnog ispitivanja navedenih odnosa. U zadnjih nekoliko godina znatne globalne promjene (poput pandemije COVID-19) dovele su do promjena u odgojno-obrazovnom sustavu te se odrazile na mentalno zdravlje djece i adolescenata i njihovo svakodnevno funkcioniranje u školi, uključujući povećani opći stres i neizvjesnost, narušavanje svakodnevne rutine i strukture učenja, smanjenu percepciju akademske kontrole i kompetencije te povišenu ispitnu anksioznost (Barbosa-Camacho i sur., 2022; Ewell i sur., 2022). Pretpostavlja se da su promjene u načinu izvođenja nastave i ispitivanja, smanjena dostupnost podrške učitelja te nesigurnost učenika u vezi s vlastitim sposobnostima mogle pojačati učestalost javljanja negativnih automatskih misli te njihov efekt na akademsku izvedbu. Istodobno, porast svijesti o važnosti očuvanja i podrške mentalnom zdravlju učenika zahtijeva daljnje razumijevanje odnosa psiholoških čimbenika i školskoga funkcioniranja mladih u novonastalom kontekstu.

Iako je odnos ispitne anksioznosti i školskog uspjeha relativno česta tema empirijskih istraživanja, manje je pažnje posvećeno medijacijskim mehanizmima koji bi objasnili djelovanje percepcije ispitne situacije, izražene automatskim mislima, i doživljaja anksioznosti na školske ishode. Konkretno, prethodna istraživanja uglavnom su se ograničila na analizu povezanosti između automatskih misli, ispitne anksioznosti i akademskoga dostignuća ili predviđanje školskog uspjeha (Mohorić, 2008; Miloseva, 2012; Živčić-Bećirević, 2003). Novija istraživanja dodatno su razmatrala ulogu ispitne anksioznosti u predviđanju akademskoga uspjeha, uz posredovanje strategija suočavanja (Genc, 2017) ili samoregulacije (Morosanova i Fomina, 2017), dok je medijatorska uloga ispitne anksioznosti

promatrana u odnosu između akademske izvedbe i čimbenika poput predodžbi o podučavanju i učenju (Baš, 2016) ili akademske prokrastinacije (Albulescu i sur., 2024), no ne i automatskih misli. Nalazi Roos i sur. (2023) dodatno upućuju na to da kognitivna komponenta ispitne anksioznosti može djelovati kao posredujuća varijabla u odnosu između procjene kontrole – koja odražava širu kognitivnu procjenu sposobnosti utjecaja na ishode i vjerovanja u vlastite kompetencije – i izvedbe učenika. Utvrđena povezanost kognitivnih čimbenika s komponentama ispitne anksioznosti i školskim ishodima sugerira da bi ispitna anksioznost, također, mogla predstavljati važan mehanizam kojim automatske misli – koje čine situacijski specifične kognitivne procese – utječu na školski uspjeh. Međutim, ti mehanizmi još uvijek nisu dovoljno istraženi. Stoga je cilj ovog istraživanja ispitati ulogu pozitivnih i negativnih automatskih misli te medijatorsku ulogu aspekata ispitne anksioznosti u objašnjenju školskog uspjeha učenika viših razreda osnovne škole, kako bi se steklo dublje razumijevanje funkcioniranja učenika u ispitnim situacijama. Prema pretpostavljenom modelu, koji će biti prikazan u nastavku, očekuju se negativni izravni učinci negativnih automatskih misli vezanih uz strah od neuspjeha, razočaranje roditelja i manjak motivacije na opći uspjeh i zadovoljstvo sobom kao učenikom, kao i pozitivan izravan učinak pozitivnih automatskih misli na obje mjere školskog uspjeha. Nadalje, očekuju se pozitivni izravni učinci negativnih automatskih misli na kognitivne i fiziološke znakove ispitne anksioznosti, dok se izravan učinak pozitivnih automatskih misli na aspekte ispitne anksioznosti ne očekuje. Osim toga, očekuju se negativni izravni učinci fizioloških i kognitivnih znakova ispitne anksioznosti na opći uspjeh te zadovoljstvo sobom kao učenikom. Ujedno se pretpostavlja da će aspekti ispitne anksioznosti djelomično posredovati u odnosu između negativnih automatskih misli i općeg uspjeha te učenikova zadovoljstva, no neće posredovati u odnosu između pozitivnih automatskih misli i mjera školskog uspjeha.

## METODA

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### Sudionici

U istraživanju je sudjelovalo 256 učenika šestih i sedmih razreda osnovne škole. Uzorak je obuhvaćao 120 dječaka (47,2 %) i 134 djevojčice (52,8 %), dok se dvije osobe nisu izjasnile o spolu. Dob sudionika varirala je u rasponu od 12 do 15 godina, s prosjekom dobi od 12,80 godina ( $SD = 0,73$ ). Jedan sudionik nije naveo svoju dob; 129 učenika u uzorku (50,79 %) pohađalo je šesti, a 125 učenika (49,21 %) sedmi razred.

## Mjerni instrumenti

Za procjenu učestalosti javljanja automatskih misli za vrijeme učenja i polaganja ispita primijenjen je *Upitnik automatskih misli za vrijeme učenja i polaganja ispita* (Živčić-Bečirević, 2003). Upitnik se sastoji od četiri podljestvice: *misli koje odražavaju strah od neuspjeha, strah od razočaranja roditelja, nedostatak motivacije i interesa* te *pozitivne automatske misli*. Kako bi se provjerila struktura upitnika u ovom istraživanju u odnosu na originalnu validaciju instrumenata, provedena je faktorska analiza korištenih upitnika. Prikladnost matrice korelacija za daljnje provođenje faktorske analize potvrđena je Kaiser-Meyer-Olkin testom ( $KMO = 0,91$ ) i Bartlettovim testom sfericiteta, koji se pokazao statistički značajnim ( $\chi^2 = 6366.33$ ,  $df = 1128$ ,  $p < 0,001$ ). Provedena je faktorska analiza na zajedničke faktore s *Varimax* rotacijom, kojom je potvrđena izvorno dobivena faktorska struktura (Živčić-Bečirević, 2003). Na temelju Kaiser-Guttmanova kriterija i analize *Scree* grafa izdvojena su četiri faktora koja zajedno objašnjavaju 44,19 % ukupne varijance. Faktorska zasićenja čestica varirala su između 0,30 (čestica 16) i 0,71 (čestica 33) za faktor 1, između 0,65 (čestica 36) i 0,82 (čestica 27) za faktor 2, između 0,37 (čestica 47) i 0,69 (čestica 43) za faktor 3 te između 0,22 (čestica 34) i 0,73 (čestica 8) za faktor 4. Komunaliteti su varirali od 0,10 do 0,76, no većina komunaliteta pokazala je umjerenu do dobru razinu objašnjene varijance pojedinačnih čestica. Upitnik sadrži 48 čestica, a od sudionika se očekuje da procijeni koliko mu se često javlja svaka od navedenih misli na skali od četiri stupnja (pri čemu 0 označuje "nikad ili gotovo nikad", a 3 "vrlo često ili gotovo uvijek"). Ukupan rezultat na podljestvicama dobiva se zbrajanjem vrijednosti odabranih za svaku česticu koja čini podljestvicu, pri čemu viši rezultat upućuje na češće javljanje određenoga tipa automatskih misli. Podljestvice upitnika pokazuju zadovoljavajuću unutarnju pouzdanost (Živčić-Bečirević, 2003), a u ovom istraživanju koeficijenti unutarnje konzistencije podljestvica iznosili su:  $\alpha = 0,92$  (*strah od neuspjeha*),  $\alpha = 0,93$  (*strah od razočaranja roditelja*),  $\alpha = 0,84$  (*pozitivne automatske misli*) i  $\alpha = 0,81$  (*nedostatak motivacije i interesa*).

Kako bi se procijenila razina ispitne anksioznosti učenika, primijenjena je adaptirana verzija Spielbergerova *Upitnika ispitne anksioznosti* (Spielberger i sur., 1978, prijevod Arambašić i sur., 1989). Upitnik je sastavljen od 32 čestice raspoređene na dvije podljestvice koje procjenjuju *kognitivne* i *fiziološke znakove ispitne anksioznosti*. Faktorska struktura upitnika provjerena je faktorskom analizom, a Kaiser-Meyer-Olkin testom ( $KMO = 0,93$ ) i statistički značajnim Bartlettovim testom sfericiteta ( $\chi^2 = 3389.86$ ,  $df = 496$ ,  $p < 0,001$ ) utvrđena je prikladnost matrice korelacija za provođenje faktorske analize. Provedena je faktorska analiza na zajedničke faktore s *Varimax* rotacijom, kojom su na temelju Kaiser-Guttmanova kriterija i analize *Scree* grafa te suk-

ladno prethodnim istraživanjima izdvojena dva faktora: *kognitivni i fiziološki aspekt*. Faktori su zajedno objasnili 36,49 % ukupne varijance. Faktorska zasićenja varirala su između 0,19 (čestica 23) i 0,73 (čestica 3) za faktor 1 te između 0,31 (čestica 22) i 0,63 (čestica 17) za faktor 2, dok je većina čestica imala komunalitete između 0,30 do 0,55 (ukupan raspon komunaliteta iznosio je 0,06 do 0,56). Zadatak sudionika bio je procijeniti učestalost javljanja svakog od navedenih znakova ispitne anksioznosti na skali od četiri stupnja (pri čemu se 1 odnosi na "nikad", a 4 na "jako često ili gotovo stalno"). Ukupan rezultat na podljestvicama dobiva se zbrajanjem procjena na pojedinim česticama koje pripadaju odgovarajućem faktoru, a viši rezultati upućuju na izraženije znakove ispitne anksioznosti. Upitnik se može rabiti i kao jednofaktorska skala, no za potrebe ovog istraživanja zadržana je dvofaktorska struktura upitnika. Upitnik je u dosadašnjim istraživanjima pokazao adekvatnu unutarnju pouzdanost (Živčić-Bečirević i Rački, 2006), a koeficijenti unutarnje pouzdanosti u ovom istraživanju iznosili su:  $\alpha = 0,89$  (*kognitivni aspekt*),  $\alpha = 0,90$  (*fiziološki aspekt ispitne anksioznosti*).

Po uzoru na prethodna istraživanja (Živčić-Bečirević i Rački, 2006), objektivna mjera školskog uspjeha temeljila se na podatku o *općem uspjehu učenika na kraju prethodnog razreda*. Zaključne ocjene učenika u ovom uzorku varirale su od 2 do 5, s prosječnom ocjenom 4,34 ( $SD = 0,62$ ). Subjektivna mjera školskog uspjeha odnosila se na procjenu koliko su sudionici zadovoljni sobom kao učenicom s naglaskom na svoje dostignuće, izraženo na skali Likertova tipa od četiri stupnja (1 označuje "uopće nisam zadovoljan/na", a 4 "potpuno sam zadovoljan/na"). Procjene zadovoljstva u uzorku učenika varirale su od 1 do 4, a prosječna procjena iznosila je 2,93 ( $SD = 0,75$ ).

## Postupak

U istraživanju su sudjelovali učenici šestih i sedmih razreda osnovnih škola na području Republike Hrvatske. Prije pristupanja ispitivanju sudionicima je detaljno objašnjena svrha istraživanja te im je zajamčena anonimnost i povjerljivost prikupljenih podataka. Za sudjelovanje učenika u istraživanju tražio se njihov informirani pristanak, kao i pisani pristanak njihovih roditelja ili zakonskih skrbnika. Ispitivanje je provedeno grupno tijekom redovite nastave, u okviru Sata razrednog odjela. Sudionici su pritom navodili demografske podatke, uključujući dob, spol, školu i razred koji pohađaju, te ispunjavali pripadajuće upitnike za procjenu automatskih misli za vrijeme učenja i polaganja ispita, kao i razine ispitne anksioznosti. Osim toga, učenici su procjenjivali svoje zadovoljstvo sobom kao učenicom te navodili podatak o zaključnoj ocjeni na kraju prethodnog razreda. Svi postupci provedeni u ovom istraživanju bili su u skladu s etičkim standardima nacionalnog etičkog kodeksa.

## REZULTATI

↻ **TABLICA 1**  
 Deskriptivni podaci  
 primijenjenih mjera i  
 koeficijenti interkorela-  
 cija varijabli ispitanih  
 u istraživanju  
 (N = 254)

	M	SD	Indeks simetričnosti	Indeks sploštenosti	$\alpha$	1	2	3	4	5	6	7	8
1 Zaključna ocjena	4,34	0,61	-0,85	0,34	/	-							
2 Zadovoljstvo	2,93	0,75	-0,46	0,16	/	0,45***	-						
3 K-IA	35,20	9,07	-0,02	-0,56	0,85	-0,22***	-0,40***	-					
4 F-IA	38,30	9,42	-0,42	-0,62	0,86	0,004	-0,20***	0,74***	-				
5 NAM-NM	10,27	5,05	-0,05	-0,77	0,81	0,01	-0,29***	0,38***	0,25***	-			
6 NAM-SRR	9,39	7,14	0,20	-1,40	0,93	-0,21***	-0,35***	0,60***	0,41***	0,36***	-		
7 NAM-SN	28,60	12,62	-0,09	-0,70	0,92	-0,26***	-0,49***	0,81***	0,59***	0,57***	0,64***	-	
8 PAM	28,79	8,48	-0,41	-0,43	0,84	0,10	0,28***	-0,06	0,02	0,03	-0,004	-0,06	-

*Napomena.* M – aritmetička sredina, SD – standardna devijacija,  $\alpha$  – Cronbachov alfa koeficijent unutarnje konzistencije; K-IA – kognitivni aspekt ispitne anksioznosti, F-IA – fiziološki aspekt ispitne anksioznosti, NAM-NM – negativne automatske misli koje odražavaju nedostatak motivacije, NAM-SRR – negativne automatske misli koje odražavaju strah od razočaranja roditelja, NAM-SN – negativne automatske misli koje odražavaju strah od neuspjeha, PAM – pozitivne automatske misli.

\* $p < 0,05$ , \*\* $p < 0,01$ , \*\*\* $p < 0,001$

Statističke analize opisane u nastavku provedene su pomoću IBM SPSS Statistics i JASP statističkih programa. Dva sudionika isključena su iz analize zbog velikoga broja nedostajućih podataka na upitnicima. Temeljni deskriptivni pokazatelji upotrijebljenih mjera, zajedno s Pearsonovim koeficijentima korelacije između analiziranih varijabli, prikazani su u Tablici 1.

Koeficijenti unutarnje konzistencije iskorištenih mjernih instrumenata kreću se od 0,81 do 0,94 (Tablica 1), što upućuje na visoku razinu pouzdanosti (Cortina, 1993). Provjerom indeksa simetričnosti i sploštenosti utvrđeno je da sve varijable zadovoljavaju pretpostavku normalne distribucije (Hair i sur., 2010). Na temelju srednjih vrijednosti, relativno u odnosu na pripadajući broj čestica pojedinih podljestvica, utvrđeno je da su kod učenika u ovom uzorku najizraženije pozitivne automatske misli, potom negativne misli koje opisuju strah od neuspjeha te fiziološki znakovi ispitne anksioznosti. Dodatno, 26 % učenika iskazuje iznadprosječne razine kognitivnih znakova ispitne anksioznosti, dok 44,5 % njih izvještava o izraženim fiziološkim znakovima ispitne anksioznosti. Na razini ukupnog rezultata, 32 % učenika navodi da "često" ili "gotovo stalno" doživljava znakove ispitne anksioznosti, što pokazuje da otprilike trećina uzorka iskazuje znakove povišene anksioznosti u ispitnim situacijama.

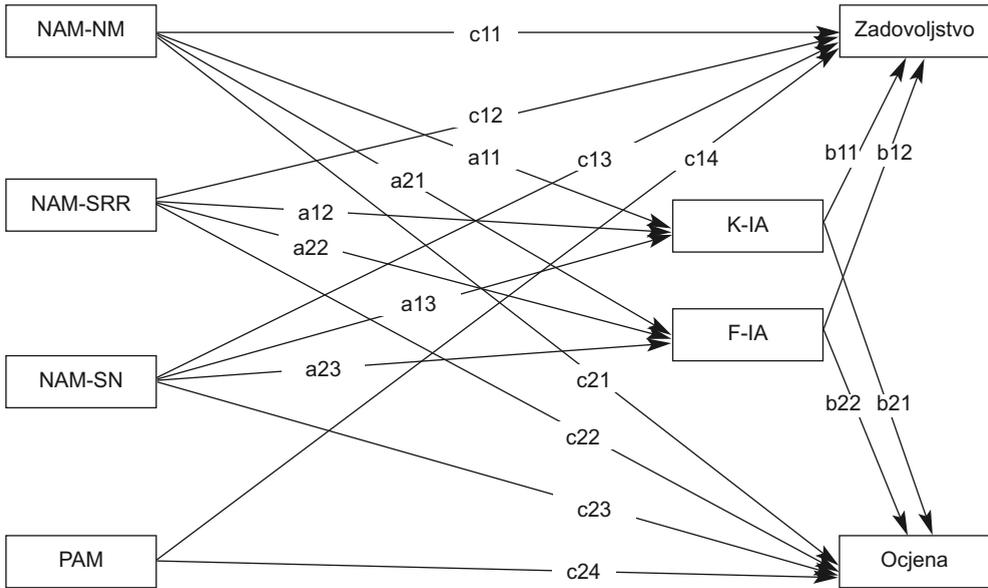
Rezultati korelacijske analize pokazuju značajnu nisku negativnu povezanost između zaključne ocjene na kraju prethodne školske godine i negativnih automatskih misli te kognitivnih znakova ispitne anksioznosti. Drugim riječima, učenici koji češće doživljavaju kognitivne znakove ispitne anksioznosti te misli povezanih sa strahom od razočaranja roditelja i strahom od neuspjeha ujedno ostvaruju slabiji opći uspjeh. S druge strane, zadovoljstvo sobom kao učenikom pokazalo je značajnu negativnu nisku do umjerenu povezanost s fiziološkim i kognitivnim aspektima ispitne anksioznosti te negativnim automatskim mislima, dok je istodobno pozitivno povezano s pozitivnim automatskim mislima. Osim što ostvaruju niži opći uspjeh, učenici koji češće doživljavaju znakove ispitne anksioznosti i negativne automatske misli ujedno su i manje zadovoljni sobom kao učenikom i vlastitim dostignućima. Nasuprot tome, viša razina zadovoljstva prisutna je kod učenika koji češće imaju pozitivne automatske misli. Konačno, utvrđena je umjerena do visoka pozitivna povezanost ispitne anksioznosti i negativnih automatskih misli. Učenici s izraženijim kognitivnim i fiziološkim znakovima ispitne anksioznosti češće doživljavaju misli koje odražavaju strah od neuspjeha, razočaranja roditelja te smanjenu motivaciju za učenjem (Tablica 1).

### **Medijacijski efekt ispitne anksioznosti u odnosu između automatskih misli za vrijeme učenja i polaganja ispita te mjera školskog uspjeha**

Postavljen je konceptualni model kojim se pretpostavlja da negativne automatske misli koje se javljaju tijekom učenja i ispitivanja ostvaruju izravne efekte na zadovoljstvo sobom kao učenikom te zaključnu ocjenu. Osim toga, pretpostavlja se da negativne automatske misli ostvaruju neizravne efekte, putem

SLIKA 1  
Predloženi model  
odnosa između  
automatskih misli za  
vrijeme učenja i  
polaganja ispita,  
aspekata ispitne  
anksioznosti i  
pokazatelja školskog  
uspjeha

aspekata ispitne anksioznosti koji posreduju u navedenom odnosu. S obzirom na izostanak povezanosti između pozitivnih automatskih misli i aspekata ispitne anksioznosti ne predviđa se medijacijski efekt ispitne anksioznosti u odnosu između pozitivnih automatskih misli i školskog uspjeha. Međutim, pretpostavlja se da pozitivne automatske misli ostvaruju izravan učinak na ishodne varijable. Predloženi model, utemeljen na relevantnoj literaturi i postavljenim istraživačkim hipotezama, prikazan je na Slici 1.

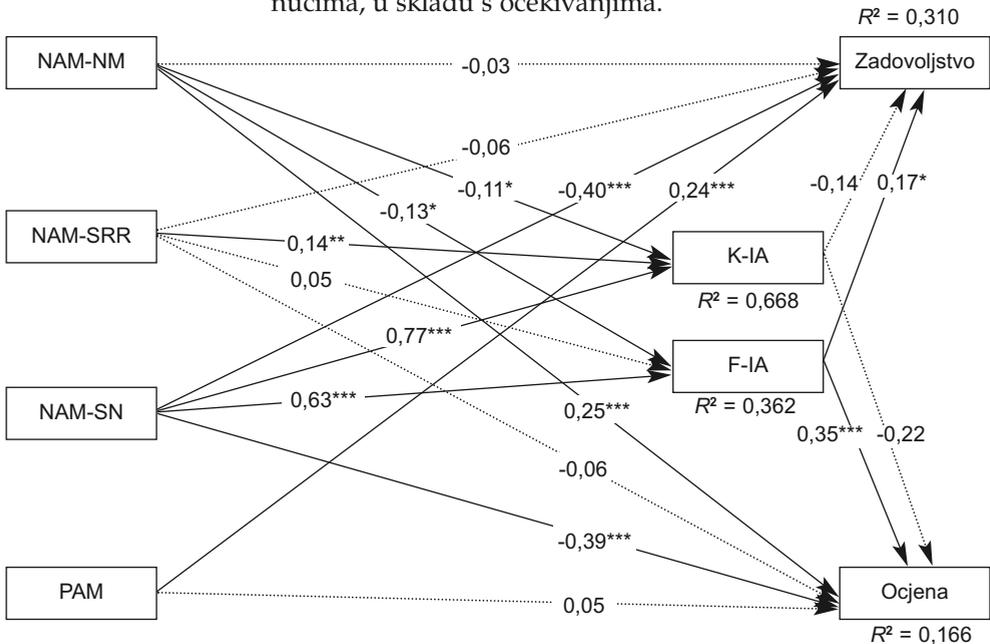


*Napomena.* K-IA – kognitivni aspekt ispitne anksioznosti, F-IA – fiziološki aspekt ispitne anksioznosti, NAM-NM – negativne automatske misli koje odražavaju nedostatak motivacije, NAM-SRR – negativne automatske misli koje odražavaju strah od razočaranja roditelja, NAM-SN – negativne automatske misli koje odražavaju strah od neuspjeha, PAM – pozitivne automatske misli, Ocjena – zaključna ocjena na kraju razreda, Zadovoljstvo – procjena zadovoljstva sobom kao učenicom.

Slaganje modela s empirijskim podacima provjereno je primjenom analize traga. Parametri predloženoga modela procijenjeni su metodom najveće vjerojatnosti (*maximum likelihood*) uz primjenu *bootstrappinga* (1000). Prikladnost modela prikupljenim podacima procijenjena je na temelju sljedećih pokazatelja: RMSEA, CFI, TLI, SRMR, GFI te omjera hi-kvadrat/stupnjevi slobode,  $\chi^2/df$ . Dobiveni indeksi slaganja modela ( $\chi^2/df = 1,28, p = 0,28; CFI = 0,999, TLI = 0,99, RMSEA = 0,03, SRMR = 0,01, GFI = 1,00$ ) u skladu su s referentnim vrijednostima (Hooper i sur., 2008), što ukazuje na zadovoljavajuću razinu slaganja pretpostavljenoga modela s empirijskim podacima. Model se, stoga, može smatrati adekvatnom reprezentacijom prikupljenih podataka te promatranih odnosa među varijablama. Slije-

di grafički prikaz modela temeljenog na dobivenim rezultatima analize, uključujući procijenjene koeficijente putova unutar modela i njihove statističke značajnosti, prikazan na Slici 2.

Na temelju prikazanih rezultata vidi se da pozitivne automatske misli ostvaruju značajan pozitivan izravan efekt na zadovoljstvo sobom kao učenicom (Slika 2), pri čemu učenici koji češće doživljavaju ohrabrujuće i poticajne misli iskazuju i viši stupanj zadovoljstva sobom i vlastitim školskim dostignućima, u skladu s očekivanjima.



SLIKA 2  
Standardizirani koeficijenti u modelu odnosa između automatskih misli za vrijeme učenja i polaganja ispita, aspekata ispitne anksioznosti i pokazatelja školskog uspjeha (N = 254)

*Napomena.* K-IA – kognitivni aspekt ispitne anksioznosti, F-IA – fiziološki aspekt ispitne anksioznosti, NAM-NM – negativne automatske misli koje odražavaju nedostatak motivacije, NAM-SRR – negativne automatske misli koje odražavaju strah od razočaranja roditelja, NAM-SN – negativne automatske misli koje odražavaju strah od neuspjeha, PAM – pozitivne automatske misli, Ocjena – zaključna ocjena na kraju razreda, Zadovoljstvo – procjena zadovoljstva sobom kao učenicom.

\* $p < 0,05$ , \*\* $p < 0,01$ , \*\*\* $p < 0,001$

Automatske misli koje odražavaju nedostatak motivacije pokazale su pozitivan izravan efekt na zaključnu ocjenu, na temelju čega se zaključuje kako učenici kojima se češće javljaju misli koje opisuju manjak motivacije za učenje ujedno imaju viši opći uspjeh na kraju prethodnog razreda. Također, fiziološki aspekt ispitne anksioznosti pokazuje statistički značajan pozitivan izravan efekt na zaključnu ocjenu i učenikovo zadovoljstvo (Slika 2).

Automatske misli koje opisuju strah od neuspjeha imaju značajan negativan izravan učinak i na učenikovo zadovolj-

stvo i na zaključnu ocjenu na kraju razreda (Slika 2), uz neizravan učinak putem fizioloških znakova ispitne anksioznosti na obje mjere školskog uspjeha. Pritom se pokazuje da automatske misli vezane uz strah od neuspjeha imaju naj snažniji izravan učinak na oba ishoda školskog uspjeh, u odnosu na ostale prediktore. Češće javljanje misli koje odražavaju strah od neuspjeha povezano je s nižom razinom zadovoljstva učenika vlastitim školskim dostignućima te nižom zaključnom ocjenom, u skladu s postavljenim hipotezama. Međutim, strah od neuspjeha ostvaruje pozitivan neizravan učinak na školski uspjeh kroz razine doživljene fiziološke ispitne anksioznosti. Češće doživljavanje misli koje odražavaju strah od neuspjeha tijekom učenja i polaganja ispita povezano je s višom razinom fizioloških simptoma ispitne anksioznosti, dok je viša razina fiziološke ispitne anksioznosti povezana s višom zaključnom ocjenom i višim stupnjem zadovoljstva učenika (Slika 2). Rezultati djelomično potvrđuju hipoteze istraživanja, jer posredovanje kognitivnog aspekta anksioznosti, kao ni posredovanje anksioznosti u odnosu između ostalih negativnih automatskih misli i školskog uspjeha, nije utvrđeno.

Zaključno, pronađen je medijacijski učinak fizioloških, no ne i kognitivnih znakova ispitne anksioznosti, specifično u odnosu između negativnih automatskih misli usmjerenih na strah od neuspjeha i školskog dostignuća mjenog općim uspjehom i zadovoljstvom svojom ulogom učenika.

Strah od razočaranja roditelja i kognitivni aspekt ispitne anksioznosti nisu pokazali značajne izravne efekte na zaključnu ocjenu te zadovoljstvo učenika. Pozitivne misli ne pokazuju značajan izravan efekt na zaključnu ocjenu, dok misli vezane uz nedostatak motivacije ne pokazuju značajan izravan efekt na učenikovo zadovoljstvo (Slika 2). Time preostale postavljene hipoteze nisu potvrđene.

Model objašnjava 31 % varijance zadovoljstva te 16,6 % zaključne ocjene. Osim toga, model objašnjava 66,8 % varijance kognitivnih i 36,2 % varijance fizioloških znakova ispitne anksioznosti.

Također, na temelju modela utvrđeno je kako svi tipovi negativnih automatskih misli predviđaju kognitivni aspekt ispitne anksioznosti, dok je fiziološke znakove moguće predvidjeti na temelju misli koje opisuju nedostatak motivacije i strah od neuspjeha (Slika 2), u skladu s očekivanjima. Pritom je češće javljanje negativnih misli koje odražavaju strah od neuspjeha, a rjeđe javljanje misli o nedostatku motivacije i interesa za učenjem, povezano s doživljavanjem intenzivnijih fizioloških i kognitivnih simptoma anksioznosti. Osim toga, učenicima s izraženijim mislima o razočaranju roditelja češće se javljaju kognitivni znakovi ispitne anksioznosti.

Ovim istraživanjem nastojalo se ispitati efekte automatskih misli na školski uspjeh te ulogu ispitne anksioznosti kao posredujuće varijable u tom odnosu, u cilju dodatnog razumijevanja mehanizama koji povezuju psihološke čimbenike sa školskim dostignućima.

Rezultati istraživanja pokazuju da trećina učenika u promatranom uzorku doživljava iznadprosječne razine ispitne anksioznosti, što je u skladu s globalnim trendovima porasta stresa i anksioznosti među mladima u zadnjih nekoliko godina (Svjetska zdravstvena organizacija, 2022). Promjene izazvane globalnim događanjima, poput socijalne izolacije i prilagodbi u obrazovnom sustavu uslijed pandemije COVID-19, negativno su se odrazile na obrazovanje i mentalno zdravlje adolescenata, osobito u kontekstu povišenoga straha i zabrinutosti vezanih uz obnašanje školskih obaveza i vlastitu budućnost (Tang i sur., 2021).

U skladu s nalazima iz literature (Mohorić, 2008; Živčić-Bećirević, 2003), rezultati ovog istraživanja pokazuju da češće javljanje negativnih automatskih misli predviđa više razine ispitne anksioznosti. Povezanost između briga oko razočaranja roditelja i ispitne anksioznosti potvrđena je i u ranijim istraživanjima, koja sugeriraju da učenici čiji roditelji imaju visoka očekivanja u vezi s njihovim dostignućima doživljavaju povećanu anksioznost zbog pritiska koji osjećaju zbog tih očekivanja (Nagpal i Sinha, 2016; Rulić i Latas, 2017). Osim straha od reakcije roditelja, osjećaji prijetnje i izražene anksioznosti mogu biti potaknuti strahom od neuspjeha, odnosno potencijalnih negativnih posljedica koje loša ocjena može imati za učenika, poput narušene slike o sebi, suočavanja s nezadovoljstvom ili razočaranjem socijalne okoline, smanjenoga društvenog statusa u razredu i/ili moguće kazne (Zeidner, 1998). Preokupacija mislima o neuspjehu i averzivnim posljedicama karakteristična je za brigu, sastavnu komponentu anksioznosti i smatra se ključnim mehanizmom negativnog utjecaja anksioznosti na akademsku izvedbu (Eysenck i sur., 2007).

Zanimljivo, dobiven je negativan efekt automatskih misli koje opisuju nedostatak motivacije i interesa na aspekte ispitne anksioznosti. Naime, čini se da su učenici koji iskazuju niži interes za učenje skloniji odustajanju te ne prepoznaju važnost učenja i pisanja ispita (odnosno, češće im se javljaju misli poput "Što će mi sve to uopće"), potencijalno se manje brinu oko ishoda ispitne situacije, u manjoj je mjeri percipiraju prijetecom, pa onda i doživljavaju niže razine anksioznosti. Anksioznost se javlja upravo kada pojedinac očekuje neuspjeh, ako dostignuća imaju subjektivnu vrijednost za njega (Pekrun i sur., 2002). Stoga učenici koji procjenjuju da ishod ispit-

ne situacije nema implikacija na njihovu dobrobit, vjerojatno je u manjoj mjeri procjenjuju kao prijetnju vlastitim vrijednostima i potrebama (Lazarus i Folkman, 2004).

Nadalje, utvrđeno je da pozitivne automatske misli imaju pozitivan izravan učinak na učenikovo zadovoljstvo vlastitim dostignućima, u skladu s nalazima prethodnih istraživanja (npr. Miloseva, 2012). Uspješniji učenici češće se oslanjaju na pozitivne misli koje umanjuju anksioznost te imaju jače izraženu motivaciju (Diaz i sur., 2001; Živčić-Bećirević, 2003). Prema Konceptualnom modelu upravljanja stresom i psihološkom dobrobiti (CMMSPW; de la Fuente i Martinez-Vincente, 2024), automatske misli čine individualne čimbenike koji predviđaju akademske ishode i dobrobit te oblikuju procesne emocionalne reakcije, a mogu se razlikovati s obzirom na njihovu regulatornu funkciju. Pozitivne automatske misli učenika mogu se promatrati kao regulatorni kognitivni procesi, jer uključuju pozitivna očekivanja o ishodima procjene i vjeru u vlastite sposobnosti te olakšavaju aktivaciju samoregulacijskih strategija. Stoga pozitivne misli mogu imati ključnu ulogu u ohrabivanju i očuvanju samopouzdanja, pomažući učenicima u suočavanju s akademskim zahtjevima te rezultirajući višim zadovoljstvom sobom i svojim postignućima.

Suprotno očekivanjima, dobiveno je da automatske misli koje odražavaju nedostatak motivacije i interesa za učenje imaju pozitivan izravan efekt na zaključnu ocjenu. Prema CMMSPW (de la Fuente i Martinez-Vincente, 2024), misli o nedostatku motivacije mogu se opisati kao neregulatorni kognitivni procesi, koji upućuju na izostanak aktivne kognitivne regulacije i smanjenu uključenost u akademske zadatke. Moguće je da učenici pritom primjenjuju kompenzacijske strategije pri suočavanju s ispitnim situacijama, poput oslanjanja na vanjsku motivaciju, kako bi unatoč prisutnosti negativnih misli ovoga tipa ostvarili uspjeh, što bi trebalo dodatno istražiti u budućim istraživanjima.

Nadalje, pokazuje se da automatske misli povezane sa strahom od neuspjeha, osim izravnog, imaju i neizravan učinak na obje mjere školskog uspjeha, preko fizioloških znakova ispitne anksioznosti kao posredujuće varijable u tom odnosu, što upućuje na složen mehanizam djelovanja automatskih misli na školski uspjeh. Učenici koji češće doživljavaju ovakve negativne misli manje su zadovoljni sobom kao učenikom i imaju niže zaključne ocjene. Istodobno, učenici koji strahuju od neuspjeha češće iskazuju izražene fiziološke simptome ispitne anksioznosti, što je u skladu s Beckovim (2007) kognitivnim modelom disfunkcionalnoga ponašanja, prema kojem negativne automatske misli potiču fiziološke reakcije i neugodne emocije karakteristične za anksioznost te disfunkcionalna ponašanja (poput izbjegavanja ili odustajanja). Precjenjivanje pri-

jetnije ili nerealistična procjena vlastitih resursa, izraženi kroz negativne automatske misli, otežavaju raspolaganje kognitivnim kapacitetima koji su potrebni u danom trenutku za ovladavanje ispitnim zahtjevima. Pritom je raspoloživ kapacitet pažnje smanjen, jer je pažnja učenika podijeljena između ispitnoga zadatka i sadržaja nerelevantnog za zadatak, odnosno ometajućih kognicija, fizioloških reakcija i emocija vezanih uz to kakav će biti ishod ispitne situacije. Stoga učenici koji doživljavaju visoku brigu češće navode poteškoće s koncentracijom, kontrolom misli i dosjećanjem informacija tijekom ispita (Aydin, 2019), što se može odraziti na broj pogrešaka na ispitu te, u konačnici, na završni uspjeh. Navedeno ide u prilog dobivenom negativnom izravnom efektu te je konzistentno dokumentirano u prethodnim istraživanjima (npr. Carey i sur., 2017, von der Embse i sur., 2018).

Međutim, iako misli koje odražavaju očekivanje nepovoljnih ishoda mogu imati negativan učinak na školski uspjeh, čini se da jednim dijelom ostvaruju pozitivan efekt putem fizioloških znakova ispitne anksioznosti. Neizravan pozitivan efekt automatskih misli na školski uspjeh pokazuje kako učenici koji češće doživljavaju misli o strahu od neuspjeha istodobno češće iskazuju izražene fiziološke reakcije na ispitne situacije (poput nervoze u želucu, znojenja, pojačanoga kucanja srca ili drhtanja ruku), pa i postižu viši školski uspjeh. Ovi nalazi sugeriraju da, za razliku od ometajuće uloge kognitivnih čimbenika, fiziološki simptomi ispitne anksioznosti ne moraju imati isključivo negativan učinak na izvedbu. U prilog tome idu nalazi Roos i sur. (2023), koji su pokazali da upravo afektivna komponenta anksioznosti može imati pozitivan izravan učinak na izvedbu. Ako su povezane s negativnom interpretacijom ispitne situacije, fiziološke reakcije mogu imati nepovoljan učinak na učenikovu izvedbu na ispitu (Cassady i Johnson, 2002; Živčić-Bećirević, 2003), no umjerena razina anksioznosti može potaknuti motivaciju i poboljšati izvedbu (Yerkes i Dodson, 1908). Stoga fiziološki znakovi anksioznosti, potaknuti strahom od neuspjeha, za neke učenike mogu biti poticaj da se bolje pripreme i pokažu svoje sposobnosti na ispitu kako bi izbjegli neuspjeh (npr. Pekrun i sur., 2002), što je u skladu s dobivenim rezultatima te modelima koji naglašavaju ulogu afektivnih stanja u oblikovanju ponašanja. Prema Modelu raspoloženja i ponašanja (Gendolla, 2000), negativna afektivna stanja povećavaju percipiranu zahtjevnost zadatka i procjenu truda koji treba uložiti u ovladavanje zadatkom (Gendolla i sur., 2001). U skladu s tim, pod utjecajem neugodnih emocija, kao što su strah ili anksioznost, pretpostavlja se da učenici češće procjenjuju ispitnu situaciju zahtjevnijom, što može potaknuti ulaganje većega truda i rezultirati boljom izvedbom – ako zadatak shvate kao savladiv. U tom kontekstu

moguće je da fiziološke promjene imaju informativni potencijal za učenika, sugerirajući važnost zadatka, povećavajući usredotočenost te motivirajući na ulaganje dodatnoga truda u uradak na ispitu i postizanje boljih rezultata, čak i u prisutnosti negativnih automatskih misli o mogućem neuspjehu, čime bi se mogli objasniti dobiveni medijatorski efekti.

Dodatno, u skladu s CMMSPW (de la Fuente i Martinez-Vincente, 2024), sam izravan učinak negativnih automatskih misli usmjerenih na strah od neuspjeha može se promatrati kao oblik kognitivne disregulacije. Pretjerano usmjeravanje na moguće negativne ishode i smanjena percepcija kontrole aktivno narušavaju proces samoregulacije i povećavaju vjerojatnost pojave anksioznih reakcija u ispitnim situacijama. Pritom se fiziološki aspekt anksioznosti u ovom istraživanju pokazao kao mehanizam s potencijalno adaptivnom funkcijom, što je u skladu s pretpostavkom modela da procesne varijable mogu djelovati i kao rizični i kao zaštitni čimbenici, ovisno o intenzitetu i kontekstu. Time se fiziološka anksioznost ne očituje kao indikator emocionalne disregulacije, nego kao dio adaptivnog, regulatornog odgovora na akademski izazov, što je u skladu s utvrđenim neizravnim učinkom.

Rezultati ovog istraživanja time se nastavljaju na dosadašnje spoznaje te potvrđuju primjenjivost CMMSPW u edukacijskom kontekstu (de la Fuente i Martinez-Vincente, 2024; de la Fuente Arias i sur., 2025). Model se pokazao korisnim okvirom za razumijevanje načina na koji se, primarno, individualni čimbenici putem regulatornih, neregulatornih i disregulatornih procesa odražavaju na akademsko funkcioniranje i subjektivnu dobrobit učenika, a školski uspjeh i zadovoljstvo sobom kao učenikom mogu se konceptualizirati kao ishodi zajedničkoga djelovanja navedenih procesa.

## **Metodološka ograničenja i preporuke za buduća istraživanja**

Unatoč tome što nalazi ovog istraživanja mogu pridonijeti razumijevanju iskustava učenika te odnosa kognitivnih i emocionalnih čimbenika sa školskim uspjehom, potreban je oprez pri izvođenju zaključaka, vodeći računa o metodološkim ograničenjima istraživanja. Prije svega ističe se primjena krossekcionalnoga nacrtu. Buduća bi se istraživanja trebala usmjeriti na longitudinalni pristup s ponovljenim mjerenjima, primjerice, prije i nakon ispita ili periodički tijekom školske godine, kako bi se dobio uvid u promjenu odnosa varijabli u različitim vremenskim točkama. Osim toga, potreban je dodatan oprez pri interpretaciji medijacijskih efekata u okviru krossekcionalnog istraživanja, jer ovakav nacrt ne omogućuje utvrđivanje uzročno-posljedičnih odnosa među varijablama. Unatoč tome, interpretacija dobivenih odnosa oslanja se na

jasnu teorijsku osnovu o međudjelovanju automatskih misli, afektivnih stanja i ponašanja (Beck, 2007; Gendolla, 2000; Zeidner, 1998), što pruža uporište za postavljene pretpostavke o smjerovima njihove povezanosti. Ujedno, eksperimentalno ispitivanje neugodnih emocionalnih stanja poput anksioznosti, osobito kod djece, može biti metodološki i etički zahtjevno, što dodatno opravdava ovakav istraživački pristup radi stjecanja uvida u odnos istraživanih varijabli. Nadalje, potencijalna mana ovog istraživanja može biti relativno malen broj sudionika, kao i prigodan uzorak, koji ograničavaju mogućnost generalizacije rezultata.

## Praktične implikacije istraživanja

Unatoč navedenim ograničenjima, ovo istraživanje predstavlja djelomičnu replikaciju prethodnih nalaza (Živčić-Bećirević i Rački, 2006) te pridonosi boljem razumijevanju kompleksnog odnosa kognitivnih i emocionalnih čimbenika sa školskim dostignućem i funkcioniranjem učenika u suvremenom odgojno-obrazovnom kontekstu. Pritom pružaju uvid u mehanizme kojima negativne automatske misli ostvaruju učinak na školski uspjeh, čime dodatno proširuju spoznaje u ovom području. Osobito važan doprinos ogleda se u prepoznavanju fizioloških znakova ispitne anksioznosti kao potencijalno adaptivnoga mehanizma, dok nalaz o pozitivnom učinku automatskih misli koje odražavaju nedostatak motivacije i interesa upućuju na moguće postojanje kompenzacijskih strategija, pružajući smjernice za buduća istraživanja.

Naposlijetku, osim teorijskoga doprinosa, rezultati imaju važne implikacije za školsku praksu, naglašavajući važnost i potrebu uključivanja emocionalno-kognitivnih aspekata u školske pristupe pružanja podrške učenicima. Konkretno, ističe se važnost razvoja preventivnih i intervencijskih programa usmjerenih na prepoznavanje i regulaciju negativnih automatskih misli, osobito straha od neuspjeha, poticanje optimalne motivacije, jačanje pozitivnih misli te jačanje vještina upravljanja anksioznošću (Talbot, 2016; Živčić-Bećirević, 2003), što može poboljšati školska dostignuća, kao i očuvanje općega mentalnog zdravlja učenika.

## ZAKLJUČAK

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Rezultati istraživanja pokazuju da automatske misli tijekom učenja i ispitivanja utječu na školski uspjeh učenika, pri čemu pozitivne automatske misli pridonose većem zadovoljstvu učenika, dok automatske misli koje odražavaju nedostatak motivacije i interesa, neočekivano, pokazuju pozitivan efekt na zaključnu ocjenu. Negativne misli koje odražavaju strah od neuspjeha utječu na školski uspjeh izravno i neizravno putem

fizioloških znakova ispitne anksioznosti. Dobiveni nalazi pridonose razumijevanju emocionalno-kognitivnih mehanizama u podlozi školskoga funkcioniranja učenika. Konkretno, upućuju na kompleksnost odnosa između automatskih misli i školskog uspjeha, pri čemu fiziološka pobuđenost predstavlja potencijalno adaptivni mehanizam koji posreduje u navedenom odnosu i omogućuje uspješniju akademsku izvedbu, unatoč negativnim automatskim mislima o mogućem neuspjehu.

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## The Mediating Role of Test Anxiety in the Relationship Between Automatic Thoughts and Academic Achievement in Elementary School Students

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The aim of this study was to examine the relationship between automatic thoughts during learning and school achievement, with emphasis on the mediating role of the cognitive and physiological aspects of test anxiety. A total of 256 sixth- and seventh-grade elementary school students (52.8% female; Mage = 12.80 years, SDage = 0.73)

participated in the study. Validated questionnaires assessing automatic thoughts and test anxiety were used, and the data on students' overall academic success and self-assessment of satisfaction with themselves as students were collected. The path analysis revealed a positive direct effect of positive automatic thoughts on the student's satisfaction, while thoughts reflecting a lack of motivation and interest in learning had a positive direct effect on the final grade. Thoughts reflecting fear of failure showed a negative direct effect on measures of school achievement, partially mediated by the physiological signs of test anxiety. The findings contribute to the understanding of emotional-cognitive mechanisms underlying school functioning and imply the importance of their integration into school prevention and intervention programmes.

Keywords: test anxiety, automatic thoughts, school achievement, school psychology



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