Original Scientific Paper
UDC: 159.947.5.072:37.091.12(497.11)
37.091.39:004.8(497.11)
DOI: 10.5937/zrffp55-60297

# PERSONALITY TRAITS AND ANXIETY RELATED TO ARTIFICIAL INTELLIGENCE AMONG EDUCATORS IN SERBIA: THE MEDIATING ROLE OF RESILIENCE, WORK LOCUS OF CONTROL, AND BURNOUT SYNDROME

Jelena I. DAVIDOVIĆ RAKIĆ[1]
Emilija U. POPOVIĆ[2]
Miljana S. PAVIĆEVIĆ[3]
University of Priština in Kosovska Mitrovica
Faculty of Philosophy
Department of Psychology
Kosovska Mitrovica (Serbia)

[1] jelena.davidovic.rakic@pr.ac.rs; https://orcid.org/0000-0002-6885-4286
[2] emilija.popovic@pr.ac.rs; https://orcid.org/0009-0007-1181-2230
[3] miljana.pavicevic@pr.ac.rs; https://orcid.org/0000-0002-8685-2495

Received: July 20, 2025
Accepted: December 10, 2025

# PERSONALITY TRAITS AND ANXIETY RELATED TO ARTIFICIAL INTELLIGENCE AMONG EDUCATORS IN SERBIA: THE MEDIATING ROLE OF RESILIENCE, WORK LOCUS OF CONTROL, AND BURNOUT SYNDROME[4]

*Keywords*:
personality traits;
resilience;
work locus of control;
burnout syndrome;
artificial intelligence;
anxiety;
educators.

*Abstract*. In the context of rapid technological advancement, particularly in the field of education, the increasing use of artificial intelligence (AI) raises questions about how individual psychological characteristics influence the experience and regulation of AI-related anxiety among teaching staff. The aim of this study was to examine whether resilience, work locus of control, and burnout syndrome mediate the relationship between personality traits and levels of AI-related anxiety among educators in the Republic of Serbia. The research was conducted on a sample of 324 teachers from primary and secondary schools. The following instruments were used: the Ten-Item Personality Inventory (TIPI–10) to assess personality dimensions, the Brief Resilience Scale (BRS) to measure resilience, Spector's Work Locus of Control Scale (SWLC), the Copenhagen Burnout Inventory (CBI) to assess burnout syndrome, and the Artificial Intelligence Anxiety Scale (AIA). The results indicate that personality traits have a weak direct effect on AI-related anxiety. Neuroticism contributes to higher levels of AI-related anxiety indirectly, through external work locus of control and burnout syndrome. Conscientiousness and resilience act as protective factors by reducing burnout syndrome and strengthening internal work locus of control, which in turn predict lower AI-related anxiety. These findings highlight the importance of strengthening teachers' internal psychological capacities in the process of adapting to the demands of a shifting educational system.

[4] This study was supported by the Ministry of Science, Technological Development, and Innovation of the Republic of Serbia (Contract No. 451-03-136/2025-03/200184).

## *Introduction*

### Anxiety Related to Artificial Intelligence

Artificial intelligence is increasingly present in modern society, significantly changing how we work, communicate, and learn. In education, its application opens new possibilities for improving teaching methods, assessment, and personalized learning through tools such as automated grading, virtual assistants, and educational data analysis (Chen et al., 2020; Chen et al., 2022). However, its presence raises concerns among teachers, especially as digitalization progresses faster than the development of their professional competencies and institutional support (Celik et al., 2022; Polak et al., 2022). While teachers recognize the potential of AI to enhance the educational process, they often lack the specific digital skills and resources for its implementation (Polak et al., 2022; Gayed, 2025). AI is often perceived as an abstract and difficult-to-understand system, triggering ambivalent emotional reactions ranging from curiosity and fascination to insecurity and fear (Kasinidou et al., 2024). This emotional discomfort is recognized in the literature as AI-related anxiety, which arises in response to perceived threats, loss of control, and a sense of unpreparedness to work with autonomous technologies (Li & Huang, 2020; Wang & Wang, 2019).

Unlike traditional computer anxiety or technophobia, AI-related anxiety includes a broader spectrum of psychological reactions to technologies capable of autonomous learning and decision-making. It typically encompasses concern for professional security, uncertainty in understanding AI systems, discomfort when encountering humanoid technologies, and a sense of exclusion from decision-making processes (Li & Huang, 2020; Wang & Wang, 2019). High levels of AI anxiety can reduce readiness to adopt technology, although in some cases it may motivate learning and improvement (Hopcan et al., 2023). Most studies emphasize that educational systems are not sufficiently prepared to address the emotional and professional needs of teachers in the context of digital transformation (Pham & Sampson, 2022). Personality traits, as relatively stable patterns of thinking, feeling, and behaving, may play an important role in how individuals perceive and respond to technological change.

## Personality Traits

Personality is defined in the psychological literature as a relatively stable and organized set of traits and internal mechanisms that determine how an individual perceives, reacts to, and adapts to their environment (Larsen & Buss, 2008). One of the most prominent theoretical frameworks in contemporary research is the Big Five personality model, which emerged within the lexical approach and assumes that personality traits can be identified through the analysis of the language people use to describe one another. The five-factor structure was first identified by Donald Fiske (1949, as cited in Goldberg et al., 1996), and its modern form was operationalized through the Big Five Inventory (BFI) developed by John and Srivastava (1999). The model comprises five basic dimensions: extraversion, which reflects social orientation, energy, and a tendency toward positive affect; agreeableness, which includes traits such as warmth, empathy, cooperativeness, and the willingness to compromise; conscientiousness, which refers to organization, self-discipline, and goal-directedness; neuroticism, which denotes a tendency to experience negative emotional states such as anxiety, sadness, and irritability; and openness to experience, which encompasses intellectual curiosity, imagination, creativity, and sensitivity to aesthetics (Smederevac & Mitrović, 2018).

In the context of attitudes toward modern technologies, personality traits shape how individuals interpret and emotionally respond to artificial intelligence. People with greater openness to experience are more likely to show curiosity and readiness to explore new digital tools, which may reduce anxiety when encountering AI systems (Devaraj et al., 2008; Schepman & Rodway, 2023). Conversely, individuals with higher neuroticism are more prone to experiencing stress and discomfort in situations of uncertainty and perceived threat, as evidenced by the negative relationship between neuroticism and attitudes toward AI (Schepman & Rodway, 2023; Stănescu & Romașcanu, 2024). This emotional reactivity increases AI-related anxiety and can lead to ambivalent or reserved attitudes toward its implementation. Dimensions such as conscientiousness, agreeableness, and extraversion are associated with a more pragmatic approach to technology: conscientious and agreeable individuals are more willing to invest effort in acquiring new skills, while extraverted individuals more often express trust in technological systems and support from their environment (Schepman & Rodway, 2023). Thus, different personality dimensions explain the variability in how educational workers accept or reject AI in their work and in the intensity of their anxiety toward technology (Devaraj et al., 2008; Stănescu & Romașcanu, 2024; Wang & Wang, 2019).

## Resilience

In psychological terms, resilience has been defined in several ways, including recovery from a stressful situation, effective coping with stress, the ability to avoid adverse circumstances, the capacity for above-average functioning under stress, and even the potential for personal growth triggered by overcoming stressful situations (Carver, 1998; Tusaie & Dyer, 2004). Synthesizing these various definitions, Windle (2010) conceptualizes resilience as an individual's ability to successfully cope with and manage significant sources of stress. It is a dynamic process through which individuals actively respond to challenges and maintain psychological balance in changing circumstances (Fletcher & Sarkar, 2013). Resilient individuals do not eliminate stress but regulate it more effectively through developed emotional and cognitive strategies, which enables more constructive problem-solving and greater adaptability. Resilience is linked to lower levels of depression and anxiety (Smith et al., 2008; Weitzel, et al., 2022), greater emotional stability, and a higher likelihood of overcoming obstacles (Tugade & Fredrickson, 2004).

In personal contexts, resilience helps to preserve mental well-being even under chronic stress, enabling individuals to overcome difficulties without long-term negative consequences for mental health. According to Guand Day (2007), resilience in the teaching profession develops as a dynamic process that includes personal strengths (e.g., self-confidence, problem-solving ability) as well as social resources (such as support from family and colleagues), enabling teachers to maintain professional engagement and motivation despite daily stressors. In the work environment, resilience helps teachers respond more effectively to challenges and uncertainties, such as changes in curricula, demanding relationships with students and parents, and limited resources. Among teachers, resilience is associated with greater job satisfaction, lower levels of burnout, and greater readiness to face the demands of modern education (Polat & İskender, 2018; Richards et al., 2016). Resilience is described as the ability to use personal and contextual resources such as emotional competence, sense of purpose, and interpersonal support to overcome professional challenges and preserve well-being and professional commitment (Mansfield et al., 2016). It is also important for adaptation to change, enabling teachers to recognize, reflect on, and adjust their strategies when facing unexpected situations, while restoring psychological balance and establishing sustainable pedagogical practice (Mansfield et al., 2016). The research conducted by Azarkerdaret al. (2022) demonstrated that resilience serves as a mediating factor in the relationship between personality traits and teachers' job satisfaction. The findings indicated that neuroticism negatively predicts both resilience and job satisfaction, whereas openness to experience, agreeableness, extraversion, and conscientiousness show positive associations with these outcomes. These results highlight the role of resilience in attenuating the adverse effects of maladaptive traits while simultaneously enhancing the impact of adaptive traits. In this sense,

resilience can be understood as a psychological resource that contributes to more effective coping with professional demands and the maintenance of higher levels of occupational satisfaction (Azarkerdar et al., 2022).

Research on the relationship between resilience and attitudes toward AI highlights several important dynamics. Gessl et al. (2019) found that resilience, alongside factors such as personality, prior experience, and expectations, is linked with the acceptance of socially assistive robots, although its effects were relatively modest compared to other predictors. More recent findings emphasize that resilience enables individuals to adapt to complex technological environments and maintain psychological balance, which in turn shapes their perceptions, readiness to engage with AI, and levels of AI-related anxiety (Basha et al., 2025). However, empirical evidence on this connection is still scarce, particularly within the educational context. Moreover, there is a lack of studies that specifically examine AI anxiety in relation to resilience, as well as the mediating role of resilience between AI and personality traits.

## Work Locus of Control

Locus of control is a general psychological construct referring to an individual's beliefs about whether events in their life are the result of their own actions (internal locus) or external factors such as luck, the power of others, or fate (Rotter, 1966). This dimension significantly influences emotional reactions, perception of control, and motivation, and is considered an important predictor of how individuals cope with stress and life challenges. Work locus of control refers to the extent to which individuals believe they can influence outcomes in their professional environment. Internal work locus of control reflects the belief that progress, success, and rewards are the result of personal effort, competence, and commitment. In contrast, external work locus of control is characterized by the perception that work outcomes are determined by factors beyond one's control, such as organizational structures, luck, politics, or authority (Spector, 1988). Empirical studies show that internal work locus of control is associated with higher levels of professional engagement, better coping strategies, and greater job satisfaction (Ng et al., 2006). Conversely, external work locus of control is often linked to feelings of helplessness, lower self-efficacy, and greater likelihood of professional burnout (Judge & Bono, 2001b).

In the context of artificial intelligence, individuals with a strong internal locus of control may show hesitation toward fully autonomous systems, as such technologies can be perceived as limiting their desire for direct involvement in decision-making, even when the possibility to override AI outcomes remains (Chiou et al., 2021). This reflects their core belief in personal influence over events, which usually encourages confidence in using new technologies but can also lead to frustration when their sense of control is challenged (Chiou et al., 2021).

Research suggests that individuals with a higher internal locus of control tend to show more positive attitudes toward AI, as they perceive themselves as capable of influencing and managing technological outcomes (Montag et al., 2025). On the other hand, individuals with a stronger external locus of control are more likely to experience fear and apprehension toward AI, perceiving it as something beyond their influence (Babiker et al., 2024; Babiker et al., 2025). Recent empirical work shows that individuals with a stronger internal locus of control tend to evaluate AI more favorably, particularly in highly regulated domains such as medicine and defense, where a sense of personal agency plays a central role in shaping attitudes (Cvetkovic et al., 2025). Cross-national evidence further indicates that this association is partly explained by AI pessimism aversion, suggesting that internal-LOC individuals may adopt more optimistic AI attitudes because they downplay potential risks (Montag et al., 2025). At the same time, research on trust in AI reveals a nuanced pattern: internal locus of control can both hinder trust when individuals prefer to rely on their own judgment and enhance it when they feel competent to manage and oversee AI systems (Pichlbauer, 2024).

While these findings highlight meaningful differences, the overall number of studies addressing the relationship between locus of control and AI remains limited, especially those examining the potential mediating role of locus of control between personality traits and attitudes toward AI and AI-related anxiety.

## Burnout Syndrome

Burnout syndrome is a response to prolonged exposure to chronic work stress that the individual cannot successfully overcome, characterized by exhaustion, emotional dysfunction, and reduced professional engagement (Maslach & Jackson, 1981). The classic definition by Maslach and Jackson (1981) describes burnout syndrome through three dimensions: emotional exhaustion (the feeling that one no longer has the psychological resources to cope with work demands), depersonalization (developing cynical, detached attitudes toward service users), and reduced personal accomplishment (the perception that professional goals are not being met and that one's performance is unsatisfactory). The Copenhagen burnout model (Kristensen et al., 2005) focuses on exhaustion as the core symptom, distinguishing between personal burnout (general exhaustion not necessarily related to work), work-related burnout (exhaustion directly related to work tasks), and client-related burnout (exhaustion resulting from direct contact with service users). This model allows for more precise identification of stress sources in professions that involve intensive work with people. Burnout impacts professional functioning by reducing motivation, causing emotional dysfunction, impairing concentration and decision-making, and increasing the risk of psychosomatic issues and absenteeism (Maslach & Leiter, 2016).

Burnout syndrome has been consistently linked to individual personality differences (Angelini, 2003). Among the Big Five traits, neuroticism emerges as the most robust predictor (Alarcon et al., 2009; Swider & Zimmerman, 2010). In contrast, conscientiousness, tends to mitigate burnout syndrome, especially depersonalization and diminished professional efficacy (Alarcon et al., 2009; Swider & Zimmerman, 2010). Additionally, extraversion is generally associated with lower burnout levels (Alarcon et al., 2009; Swider et al., 2010). The protective influence of agreeableness likely contributes by fostering supportive workplace relationships that buffer stress (Alarcon et al., 2009; Swider & Zimmerman, 2010). Although openness to experience often shows weaker, more inconsistent associations with burnout syndrome, some evidence suggests a modest negative relationship, particularly regarding personal accomplishment (Alarcon et al., 2009; Swider & Zimmerman, 2010).

In the teaching profession, burnout syndrome is often linked to consistently high demands, emotionally demanding work with students, parents, and colleagues, administrative burdens, and lack of systemic support (Schwab et al., 1986). Teachers with pronounced burnout symptoms show a reduced ability to maintain a positive classroom atmosphere, weaker student behavior management strategies, and less creativity in teaching (Skaalvik & Skaalvik, 2020). Burnout contributes to decreased job satisfaction and greater intention to leave the profession, which can affect the long-term stability of the educational system (Skaalvik & Skaalvik, 2010).

The integration of AI into educational and professional contexts has a dual impact on employees' well-being, particularly regarding burnout. On the one hand, the growing presence of AI in the workplace can heighten stress by amplifying fears of professional devaluation, replacement, or loss of autonomy, which in turn contributes to emotional exhaustion and reduced professional efficacy (Babiker et al., 2025; Zhang et al., 2023). A heightened awareness of AI-driven changes may deplete one's psychological resources, creating a sense of uncertainty and lowering perceived professional value, thereby fostering conditions that increase the risk of burnout. In educational settings, such concerns are especially pronounced among teachers, where AI awareness has been linked to diminished organizational self-esteem and increased vulnerability to burnout (Zhang et al., 2023; Zhang & Xiong, 2025).

At the same time, empirical findings suggest that psychological resources such as resilience, as well as contextual supports such as institutional assistance, can mitigate these risks. For instance, research shows that both AI literacy and resilience serve as protective factors that mediate the relationship between work stress and burnout, reducing the likelihood that stress will translate into sustained exhaustion or disengagement (Yin et al., 2025). Similarly, studies indicate that adequate organizational support can buffer the negative effects of AI awareness on burnout, underscoring the importance of institutional strategies in supporting

faculty during technological transitions (Zhang et al., 2023). Moreover, while AI integration can sometimes be perceived as a threat, it also has the potential to foster professional development and reduce technology-related exhaustion when implemented thoughtfully. Evidence demonstrates that teachers who are supported in the use of AI-enhanced tools not only report lower levels of digital burnout but also experience greater autonomy and professional growth, suggesting that guided AI adoption can create opportunities for sustainable teaching practices rather than additional stressors (Duan & Zhao, 2024).

Although theoretical models and individual studies indicate a connection between personality traits and general attitudes toward technology and digital innovations, specific links between personality traits and anxiety related to AI have not yet been systematically examined. Existing literature has mainly focused on phenomena such as technophobia, acceptance of digital tools, or general digital literacy, while emotional reactions such as AI anxiety and their psychological correlates have remained relatively neglected in the educational context (Cabero-Almenara et al., 2024; Polat, 2025; Rehman et al., 2024; Silagan &Tumapon, 2025). Given that personality traits significantly determine how individuals interpret and respond to changes in their environment, it can be assumed that the relationship between personality and AI anxiety is not direct but occurs indirectly through certain psychological processes and experiences in the professional context (Basha et al., 2025; Park & Woo, 2022; Stănescu & Romaşcanu, 2024). In this framework, constructs such as resilience, work locus of control, and burnout at work emerge as potentially relevant mediating factors that may contribute to a better understanding of individual differences in how teachers experience the presence and use of AI in education. Analyzing these factors allows for a deeper understanding of the complex dynamics of teachers' emotional responses to contemporary challenges of digital transformation in education, as well as the identification of potential points of intervention to provide adequate support to educational workers. The research question is: do resilience, work locus of control, and burnout at work mediate the relationship between personality traits and anxiety related to artificial intelligence among educational workers?

## *Method*

### Sample

The sample consisted of 324 educational workers, 70% of whom were female (*nf* = 227, *nm* = 97), aged between 22 and 63 years ($M$ = 40.44; $SD$ = 9.40), with work experience ranging from six months to forty years ($M$ = 13.49; $SD$ = 8.99). The participants were employed in primary schools (51.5%) and secondary schools (48.5%).

## Instruments

The first instrument used was the Ten-Item Personality Inventory (TIPI-10; Gosling et al., 2003), a shortened version of the BFI-44 (John et al., 1991; John & Srivastava, 1999). Each of the five personality dimensions is represented by two items, one positively and one negatively worded. Participants responded using a five-point Likert scale, where 1 indicated "completely untrue" and 5 indicated "completely true." Example items for the individual dimensions include: "I am generally a sociable person" (Extraversion, E), "I generally trust people" (Agreeableness, A), "I perform my duties thoroughly" (Conscientiousness, C), "I get irritated easily" (Emotional Stability, ES), and "I have a vivid imagination" (Openness to Experience, O). Cronbach's alpha reliabilities reported in the original study (Gosling et al., 2003) were: Extraversion $\alpha = .68$, Agreeableness $\alpha = .40$, Conscientiousness $\alpha = .50$, Emotional Stability $\alpha = .73$, and Openness to Experience $\alpha = .45$. Because the research question involved multiple variables, the researchers used the shortened version of the inventory, the BFI-10, instead of the BFI-44. The rationale for this decision, in addition to the general trend of reducing the number of items per scale, was based on two methodological considerations: it reduces the time required to complete the questionnaire, which has a motivating effect on participants; and the use of the scale is justified by the authors of the brief version (Gosling et al., 2003).

Resilience was assessed using the Croatian adaptation of Smith et al.'s (2008) Brief Resilience Scale (BRS) by Slišković and Burić (2018). The scale includes six items and has demonstrated good reliability across four different samples, with Cronbach's alpha ranging from 0.81 to 0.91 (Slišković & Burić, 2018). Three items are positively worded (e.g., "I usually come through difficult times with little trouble") and three negatively worded (e.g., "It takes me a long time to get over setbacks in my life"). Responses are given on a five-point Likert scale, with anchors ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The total score is the average of all responses, with negatively worded items reverse-coded, so that higher scores indicate higher levels of resilience.

Work locus of control was assessed using Slišković et al.'s (2014) Croatian adaptation of the original SWLC (Spector, 1988). The scale includes eight items for internal locus of control (e.g., "A job is what you make of it") and eight items for external locus of control (e.g., "Promotions usually go to lucky people"). Responses are given on a six-point Likert scale ranging from 1 ("strongly disagree") to 6 ("strongly agree"). Separate scores were then calculated for internal and external locus of control. In the Croatian study, Cronbach's alpha was 0.81 for internal locus of control and 0.88 for external locus of control (Slišković et al., 2014).

The Copenhagen Burnout Inventory (CBI; Kristensen et al., 2005) consists of seven items with responses on a five-point Likert scale ranging from 1 ("almost never") to 5 ("almost always"). An example item is: "Is your work emotionally

exhausting?" One item is reverse-coded prior to scoring, and the total score is calculated as the average of all responses. Higher scores indicate higher levels of burnout. In a sample of educational workers in Slovenia, Cronbach's alpha was 0.78 (Rajović et al., 2021).

The original Artificial Intelligence Anxiety Scale (AIAS; Wang & Wang, 2019) consists of 21 items, with responses provided on a seven-point Likert scale (1 = completely untrue to 7 = completely true). In the present study, a 19-item version was used, grouped into two factors (Davidović Rakić et al., 2024): 1) doubt in one's ability to understand artificial intelligence and 2) concern about the consequences of artificial intelligence development. Two items were excluded due to high cross-loadings. An example item for the first factor is "Reading a manual about artificial intelligence makes me feel anxious," and for the second factor, "I am afraid that artificial intelligence will replace someone's job." Despite the exclusion of two items, the scale demonstrated excellent reliability, with Cronbach's alpha coefficients of .97 for the first factor and .98 for the second factor (Davidović Rakić et al., 2024).

Sociodemographic variables included gender and school level (primary/secondary) as categorical variables, and age and years of service as continuous variables.

## Data Analysis

To examine whether and to what extent personality traits are associated with AI-related anxiety, as well as with resilience, internal and external work locus of control, and job burnout as mediators of this relationship, Pearson correlation coefficients were first calculated.

For a variable to be considered a mediator (in this study: resilience, internal and external work locus of control, and job burnout), several conditions need to be met (Baron & Kenny, 1986): the predictor variable (personality) must significantly predict the criterion variable (AI anxiety); the predictor must significantly predict the mediator variables; and the mediator variables must significantly predict the criterion variable while controlling for the predictor.

Based on these assumptions, hierarchical multiple regression analyses were conducted. In the first step, only personality dimensions were entered as predictors. In the second step, resilience, internal and external work locus of control, and job burnout were added, in order to examine their role in predicting AI anxiety as the criterion variable.

Given that a high correlation was found between the two extracted factors on the AI Anxiety Scale, this variable was treated as a single measure in the subsequent analyses.

Since a prerequisite for testing mediation is that the predictor significantly predicts the mediator variables, multiple regression analysis was conducted for this

step. Following preliminary analyses, the mediating role of internal and external work locus of control, resilience, and job burnout in the relationship between personality traits and AI anxiety was tested using multiple mediation analysis, following the procedure proposed by Preacher and Hayes (2008). Complete mediation is indicated when the direct effect of the predictor on the criterion becomes non-significant after introducing the mediators, while the indirect effect through the mediators remains significant. Partial mediation occurs when both the direct and indirect effects of the predictor on the criterion are significant (Čačić & Gavrilov-Jerković, 2013).

## *Results and Discussion*

### Descriptive Statistics of the Observed Variables

Table 1 presents the descriptive statistics of the examined variables.

Table 1. Descriptive indicators of personality traits: extraversion, agreeableness, conscientiousness, neuroticism, openness to experience, AI-related anxiety, work locus of control, resilience, and burnout at work

| Variable | *Min.* | *Max.* | *M* | *SD* | *Sk* | *Ku* |
|---|---|---|---|---|---|---|
| Extraversion | 2 | 5 | 3.37 | 0.63 | 0.64 | 0.06 |
| Agreeableness | 1.5 | 5 | 3.69 | 0.70 | -0.26 | -0.37 |
| Conscientiousness | 1.5 | 5 | 3.95 | 0.80 | -0.46 | -0.48 |
| Neuroticism | 1 | 5 | 2.78 | 0.90 | 0.36 | -0.22 |
| Openness to experience | 1 | 5 | 3.36 | 0.88 | 0.21 | -0.61 |
| Doubt in one's ability to understand AI | 1 | 7 | 3.14 | 1.65 | 0.41 | -0.82 |
| Concern about the consequences of AI development | 1 | 7 | 3.93 | 1.83 | -0.07 | -1.21 |
| Internal work locus of control | 1 | 6 | 4.13 | 0.99 | -0.43 | -0.20 |
| External work locus of control | 1 | 6 | 3.38 | 1.12 | 0.18 | -0.38 |
| Resilience | 1 | 5 | 3.10 | 0.70 | -0.15 | 0.86 |
| Burnout syndrome | 1 | 5 | 2.52 | 0.80 | 0.18 | -0.20 |

An inspection of Table 1 indicates that all variables included in the study exhibit a normal distribution of scores based on skewness and kurtosis coefficients ($-1.5 < Sk, Ku < 1.5$), consistent with standard recommendations for research in the social sciences and humanities (Tabachnick & Fidell, 2021).

## Correlation Analysis Results

The intercorrelations among the examined variables are summarized in Table 2.

Table 2. Correlations among the study variables

| | *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Extraversion | - | | | | | | | | | |
| 2. Agreeableness | .05 | - | | | | | | | | |
| 3. Conscientiousness | .18** | .20** | - | | | | | | | |
| 4. Neuroticism | .05 | -.21** | -.04 | - | | | | | | |
| 5. Openness | .10 | .09 | -.02 | -.07 | - | | | | | |
| 6. Doubt AI understanding | -.10 | .01 | -.05 | **.11*** | .01 | - | | | | |
| 7. Concern AI consequences | -.03 | .02 | .01 | .07 | .07 | **.77**** | - | | | |
| 8. Internal LoC | .03 | .06 | **.17**** | **-.16**** | .07 | **.15**** | **.24**** | - | | |
| 9. External LoC | -.10 | -.04 | -.03 | **.14*** | -.05 | **.40**** | **.39**** | **.35**** | - | |
| 10. Resilience | -.06 | .05 | .06 | **-.42**** | -.03 | **-.18**** | **-.17**** | .07 | **-.29**** | - |
| 11. Burnout syndrome | -.05 | -.17** | **-.18**** | **.31**** | -.01 | **.23**** | **.20**** | **-.12*** | **.30**** | **-.41**** |

*p < .05; **p < .01, *** p < .001; LoC = Locus of Control

The predictor variables were the personality dimensions of the Big Five model. Correlations were found between conscientiousness and extraversion ($r = .18$, $p < .01$) and agreeableness ($r = .20$, $p < .01$), as well as between neuroticism and agreeableness ($r = -.21$, $p < .01$).

The criterion variable was AI-related anxiety, represented by its two factors. Only one factor of AI-related anxiety showed a correlation with personality dimensions, specifically with neuroticism ($r = .11$, $p < .05$).

All observed mediator variables were associated with both factors of AI-related anxiety, whereas none correlated with extraversion or openness to experience.

It was shown that burnout is significantly, moderately, and positively associated with neuroticism ($r = .31$, $p < .01$), weakly positively associated with doubt in one's ability to understand AI ($r = .23$, $p < .01$), concern about the consequences of AI development ($r = .20$, $p < .01$), and an external locus of control ($r = .30$, $p < .01$). Conversely, burnout is negatively associated with agreeableness ($r = -.17$, $p < .01$), conscientiousness ($r = -.18$, $p < .01$), internal locus of control ($r = -.12$, $p < .05$), and resilience ($r = -.41$, $p < .01$), with the strongest negative correlation observed between burnout and resilience, indicating that individuals with higher resilience experience lower levels of burnout. These findings suggest that burnout is linked not only to lower resilience, conscientiousness, and agreeableness, as well as to a weaker internal locus of control, but also to higher levels of doubt in one's ability to understand AI and concern about the consequences of AI development. This pattern indicates that both personality traits and AI-related perceptions contribute to differences in burnout among educational workers. Resilience was negatively associated with neuroticism ($r = -.42$, $p < .01$), doubt in one's ability to understand AI ($r = -.18$, $p < .01$), concern about the consequences of AI development ($r = -.17$,

$p < .01$), and external locus of control ($r = -.29$, $p < .01$). It was positively, albeit weakly, associated with internal locus of control ($r = .07$, not significant). This indicates that emotionally stable individuals tend to be more resilient and less influenced by doubts or external pressures related to AI.

Given the high correlation between the two factors of AI-related anxiety ($r = .77$, $p < .01$), subsequent data analyses, including the testing of mediation assumptions and mediation itself, treated AI-related anxiety as a single criterion variable.

## Mediation Analysis

### Assumptions for Mediation Testing

Hierarchical multiple regression analysis was conducted to examine the contribution of personality traits to the overall variance in AI-related anxiety. In the second step, the analysis tested whether the proposed mediators (resilience, internal and external work locus of control, and burnout at work) significantly predicted AI-related anxiety while controlling for the predictor variables.

The results of the first step showed that personality traits explained only 2% of the variance in AI-related anxiety ($R^2 = .02$, $F(5, 318) = 1.15$, $p = .33$), indicating that the model was not significant. However, neuroticism emerged as a significant predictor, with a beta coefficient of $\beta = .11$ ($p < .05$).

When the proposed mediators (internal and external work locus of control, resilience, and burnout at work) were added in the second step, the amount of explained variance in AI-related anxiety increased significantly ($R^2 = .20$, $\Delta R^2 = .18$, $F(5, 314) = 8.97$, $p < .001$). External work locus of control ($\beta = .36$, $p < .001$) and burnout at work ($\beta = .36$, $p < .05$) emerged as significant predictors. Higher levels of external work locus of control and burnout were associated with higher levels of AI-related anxiety. Under the influence of the mediator variables, neuroticism lost its predictive effect and was no longer significant. This indicates that neuroticism influences AI-related anxiety indirectly, through external work locus of control and burnout.

As only two of the four proposed mediator variables (external work locus of control and burnout) were significant predictors of the criterion variable, multiple regression analysis was conducted to examine whether the predictor variable (personality traits) significantly predicted these mediators. The results (Table 3) showed that the model predicting external work locus of control was significant ($R^2 = .04$, $F(5, 318) = 2.58$, $p = .05$), with neuroticism as the only significant predictor ($\beta = .14$, $p = .01$). The model predicting burnout was also significant ($R^2 = .13$, $F(5, 318) = 9.44$, $p < .001$), with neuroticism ($\beta = .29$, $p < .001$) and conscientiousness ($\beta = -.15$, $p = .01$) emerging as significant predictors.

Table 3. Personality traits as predictors of external work locus of control and burnout syndrome

| | External LoC | | Burnout syndrome | |
|---|---|---|---|---|
| Personality traits | Beta | Sig. | Beta | Sig. |
| Neuroticism | .141 | .01* | .29 | .00*** |
| Extraversion | -.101 | .07 | -.03 | .59 |
| Openness | -.031 | .58 | .01 | .26 |
| Conscientiousness | -.008 | .88 | -.15 | .01** |
| Agreeableness | -.005 | .92 | -.08 | .15 |

*p < 0.05 **p < 0.01 ***p < 0.001

## Results of Mediation Analysis

Although the first model was not significant in predicting AI-related anxiety, neuroticism emerged as a significant predictor within that model. In the second step, among the proposed mediators, external work locus of control and burnout at work were identified as significant predictors of AI-related anxiety.

Table 4. Total, direct, and indirect effects of internal and external work locus of control, resilience, and burnout on AI-related anxiety with personality traits as predictors

| | Basic parameters | | | CI (95%) | |
|---|---|---|---|---|---|
| | Coefficient *ab* (*SE*) | Coefficient *a* | Coefficient *b* | Lower | Upper |
| Extraversion | | | | | |
| Direct effect (c) | -.08 (.13) | | | -.34 | .18 |
| Total effect (c') | -.16 (.14) | | | -.43 | .12 |
| Indirect– Internal LoC | .01 (.01) | .04 | .09* | -.03 | .05 |
| Indirect – External LoC | -.08 (.06) | -.17 | .48** | -.20 | .01 |
| Indirect – Resilience | .01 (.02) | -.11 | -.13 | -.02 | .04 |
| Indirect – Burnout | -.01 (.02) | -.06 | .24* | -.07 | .02 |
| Agreeableness | | | | | |
| Direct effect (c) | .11 (.13) | | | -.13 | .34 |
| Total effect (c') | .03 (.12) | | | -.23 | .29 |
| Indirect– Internal LoC | .01 (.01) | .08 | .18* | -.01 | .04 |
| Indirect – External LoC | -.03 (.05) | -.07 | .48** | -.13 | .06 |
| Indirect – Resilience | -.01 (.01) | .05 | -.12 | -.04 | .02 |
| Indirect – Burnout | -.05 (.04) | -.19** | .26* | -.13 | .00 |
| Conscientiousness | | | | | |
| Direct effect (c) | -.01 (.11) | | | -.27 | .18 |
| Total effect (c') | -.04 (.11) | | | -.22 | .20 |
| Indirect– Internal LoC | .04 (.02) | .20** | .18* | -.01 | .10 |

| | | | | | |
|---|---|---|---|---|---|
| Indirect – External LoC | -.02 (.04) | -.05 | .48** | -.11 | .06 |
| Indirect – Resilience | .01 (.01) | .05 | -.12 | -.04 | .02 |
| Indirect – Burnout | -.04 (.03) | -.18** | .24* | -.12 | .01 |
| Neuroticism | | | | | |
| Direct effect (c) | .02 (.10) | | | -.16 | .26 |
| Total effect (c') | .19 (.10)* | | | .01 | .41 |
| Indirect– Internal LoC | -.03 (.02) | -.17 (.06)** | .19* | -.08 | .01 |
| Indirect – External LoC | .08 (.04)* | .17 (.07)** | .48** | .01 | .17 |
| Indirect – Resilience | .04 (.06) | -.32 (.04)** | -.12 | -.06 | .14 |
| Indirect – Burnout | .07 (.04)* | .27 (.05)** | .24* | .01 | .16 |
| Openness | | | | | |
| Direct effect (c) | .10 (.10) | | | -.13 | .28 |
| Total effect (c') | .08 (.10) | | | -.09 | .28 |
| Indirect– Internal LoC | .01 (.01) | .08 | .17 | -.01 | .03 |
| Indirect – External LoC | -.03 (.04) | -.06 | .49** | -.11 | .04 |
| Indirect – Resilience | .00 (.01) | -.03 | -.11 | -.01 | .03 |
| Indirect – Burnout | .00 (.04) | -.01 | .24* | -.04 | .03 |

Note: Coefficient ab—indirect effect of the mediator in the relationship between the predictor and the criterion; a—effect of the predictor on the mediator; b—effect of the mediator on the criterion; c'—direct effect of the predictor on the criterion when the effect of the mediator is controlled for; c—total effect. All values represent unstandardized regression coefficients. **p < .01, *p < .05.

No significant direct effect of extraversion on AI-related anxiety was found, nor were the indirect paths significant. The finding that extraversion is not a predictor of AI-related anxiety is consistent with previous studies (Park & Woo, 2022; Stănescu & Romașcanu, 2024). However, higher levels of external work locus of control and burnout were associated with greater AI-related anxiety, although this mediation effect did not reach statistical significance. Similarly, Schepman and Rodway (2023) reported that extraversion does not consistently predict either positive or negative attitudes toward artificial intelligence, suggesting a limited role of this personality trait in shaping individuals' responses to AI technologies.

In the case of agreeableness, no significant direct or total effects were identified. However, a negative effect of agreeableness on burnout emerged, indicating that individuals with higher levels of agreeableness are less prone to emotional exhaustion. This finding is consistent with teacher-focused meta-analytic evidence showing that agreeableness (and conscientiousness) are negatively associated with emotional exhaustion and depersonalization among teachers (Kim et al., 2019; Liu et al., 2022). Furthermore, the results indicate that higher levels of burnout predict higher levels of AI-related anxiety. Conscientiousness did not show a significant direct relationship with AI-related anxiety, but significant effects were observed on internal work locus of control and burnout ($\beta$ = -0.31, $p$ < .01).

Conscientiousness was negatively associated with burnout ($\beta$ = -0.27, $p$ < .01), which in turn had a positive effect on AI-related anxiety ($\beta$ = 0.29, $p$ < .01). In other words, lower conscientiousness leads to higher levels of burnout, and higher levels of burnout lead to greater AI-related anxiety. This indicates an indirect protective effect of conscientiousness through reduced emotional exhaustion, consistent with core-self-evaluations theory and findings on locus of control and work outcomes (Judge & Bono, 2001a) as well as the teacher-burnout meta-analytic evidence noted above.

For neuroticism, a significant total effect on AI-related anxiety was found ($\beta$ = 0.41, $p$ < .001), but this effect was fully mediated by external work locus of control (indirect effect: $\beta$ = 0.18, 95% CI [0.09, 0.29]) and burnout (indirect effect: $\beta$ = 0.15, 95% CI [0.07, 0.24]). Individuals with higher levels of neuroticism showed a stronger tendency to perceive control as external and experienced greater emotional exhaustion, both of which were significantly related to higher AI-related anxiety. These results align with Sharan and Romano's (2020) findings that personality and locus of control influence trust and responses to AI, as well as with meta-analytic work linking higher neuroticism to greater burnout.

Openness to experience did not show any significant direct ($\beta$ = 0.05, $p$ = .42) or indirect effects (indirect effect: $\beta$ = 0.03, 95% CI [−0.02, 0.08]) on AI-related anxiety, supporting Schepman and Rodway's (2023) observation that personality effects on AI attitudes are often weak or contingent (e.g., openness matters mainly when combined with prior experience or targeted training).

Overall, these findings suggest that personality traits most often influence AI-related anxiety indirectly—via emotional (burnout) and cognitive (locus of control) mediators—rather than via strong direct paths. Neuroticism stands out because its influence appears to be channeled through greater externalization of control and higher emotional exhaustion, both of which predict increased AI-related anxiety. The teacher-specific meta-analyses cited above (Kim et al., 2019; Liu et al., 2022) provide additional support for the links between Big Five traits and burnout that underlie these mediational paths.

This study provides deeper insight into how personality traits and psychological mechanisms, such as work locus of control and burnout, influence AI-related anxiety among teachers. The results indicate that personality traits rarely exert direct effects on AI-related anxiety; rather, they operate primarily through emotional and cognitive mediators. Neuroticism emerged as the trait that, indirectly through burnout and external work locus of control, contributes to increased AI-related anxiety.

By contrast, conscientiousness and agreeableness did not have significant direct effects on AI-related anxiety. However, they exert protective influences by fostering emotional resilience and perceptions of personal control over professional challenges, both of which predict AI-related anxiety. Extraversion and openness to experience showed no significant impact in this context.

## *Conclusion*

Among all examined personality dimensions, only neuroticism was significantly correlated with AI-related anxiety ($r = 0.38$, $p < .001$). Agreeableness significantly predicted burnout ($\beta = -0.22$, $p < .05$), conscientiousness significantly predicted internal work locus of control ($\beta = 0.30$, $p < .01$) and burnout ($\beta = -0.27$, $p < .01$), and neuroticism predicted external work locus of control ($\beta = 0.34$, $p < .001$), resilience ($\beta = -0.18$, $p < .05$), and burnout ($\beta = 0.29$, $p < .01$). Burnout ($\beta = 0.31$, $p < .001$) and external work locus of control ($\beta = 0.24$, $p < .01$) significantly predicted AI-related anxiety.

Although the evidence is not definitive due to the aforementioned limitations, the study demonstrated that neuroticism contributes to increased AI-related anxiety through perceptions of external work locus of control and burnout.

To reduce AI-related anxiety among teachers with high neuroticism, our findings highlight the importance of creating an educational work environment that provides teachers with greater autonomy in decision-making—thus strengthening perceptions of internal work locus of control—while simultaneously reducing emotional exhaustion. Furthermore, the results suggest the need to investigate the relationship between AI-related anxiety and other personality models, as well as contextual features of the educational environment that may help mitigate this type of anxiety, by including educators from different educational systems in future research.

## *Limitations and Future Implications*

This study has several limitations that should be acknowledged. First, the choice of instruments for assessing personality traits may have influenced the findings. While shorter scales were used to manage the large number of variables, they may not fully capture the complexity of individual differences. Future research could employ more comprehensive or multi-method assessments, such as behavioral measures or longitudinal self-reports, to better understand how personality interacts with AI perceptions over time. Second, the study was conducted on a sample of teachers from a single national context (Serbia), which may limit the generalizability of the results to other educational, professional, or cultural settings. Cultural differences in attitudes toward technology, trust in AI, and sources of professional anxiety may shape the observed relationships in ways that are not captured in this study. Third, the cross-sectional design prevents drawing causal conclusions about the links between personality traits, work locus of control, AI-related anxiety, resilience, and burnout. Longitudinal or experimental studies could clarify the directionality of these relationships and explore potential

feedback loops, such as whether AI anxiety increases burnout risk or whether burnout amplifies negative perceptions of AI.

The practical implications of these findings emphasize the need to design support programs for teachers and other professionals that address both general workplace stress and AI-related anxiety. Interventions could include training to enhance internal work locus of control, resilience-building, digital literacy, and coping strategies specifically targeting the challenges and uncertainties posed by AI integration in professional settings. Future research should track these dynamics over time, explore moderating factors such as experience with AI or prior training, and compare educational and occupational contexts across countries to identify both universal and culturally specific patterns in AI-related attitudes, anxiety, and well-being.

## *References*

Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009). Relationships between personality variables and burnout: A meta-analysis. *Work & Stress*, *23*(3), 244–263. https://doi.org/10.1080/02678370903282600

Angelini, G. (2023). Big Five model personality traits and job burnout: A systematic literature review. *BMC Psychology*, *11*, 49. https://doi.org/10.1186/s40359-023-01056-y

Azarkerdar, F., Pourehsan, S., & Towhidi, A. (2022). The mediating role of resilience in the relationship between personality traits with job satisfaction in teachers. *Educational Psychology*, *18*(65), 183–201. https://doi.org/10.22054/jep.2022.63789.3482

Babiker, A., Alshakhsi, S., Al-Thani, D., Montag, C., & Ali, R. (2024). Attitude towards AI: Potential influence of conspiracy belief, XAI experience and locus of control. *International Journal of Human–Computer Interaction*, *41*(13), 7939–7951. https://doi.org/10.1080/10447318.2024.2401249

Babiker, M., Merisalu, E., Roja, Ž., & Kalkis, H. (2025). Prospective effects of artificial intelligence on burnout syndrome: Reducing risks and enhancing psychological well-being. *Sigurnost: časopis za sigurnost u radnoj i životnoj okolini*, *67*(2), 135–141. https://doi.org/10.31306/s.67.2.4

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality & Social Psychology*, *51*, 1173–1182.

Basha, S. E., Alquqa, E. K., Aldabbas, H., & Elamin, A. M. (2025). The mediating role of resilience in the relationship between attitude towards artificial intelligence and workplace well-being. *Journal of Posthumanism*, *5*(6), 2326–2339. https://doi.org/10.63332/joph.v5i6.2341

Cabero-Almenara, J., Palacios-Rodríguez, A., Loaiza-Aguirre, M. I., & Rivas-Manzano, M. d. R. d. (2024). Acceptance of educational artificial intelligence by teachers and its relationship with some variables and pedagogical beliefs. *Education Sciences*, *14*(7), 740. https://doi.org/10.3390/educsci14070740

Carver, C. S. (1998). Resilience and thriving: Issues, models, and linkages. *Journal of Social Issues*, *54*(2), 245–266.

Celik, I., Dindar, M., Muukkonen, H., & Järvelä, S. (2022). The promises and challenges of artificial intelligence for teachers: A systematic review of research. *TechTrends*, *66*(4), 616–630. https://doi.org/10.1007/s11528-022-00715-y

Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. *IEEE Access*, *8*, 75264–75278. https://doi.org/10.1109/ACCESS.2020.2988510

Chen, X., Zou, D., Xie, H., Cheng, G., & Liu, C. (2022). Two decades of artificial intelligence in education. *Educational Technology & Society*, *25*(1), 28–47.

Chiou, M., McCabe, F., Grigoriou, M., & Stolkin, R. (2021). Trust, shared understanding and locus of control in mixed-initiative robotic systems. In: *2021 30th IEEE International Conference on Robot & Human Interactive Communication (RO-MAN)* (pp. 684–691). Vancouver, BC, Canada: IEEE. https://doi.org/10.1109/RO-MAN50785.2021.9515476

Cvetkovic, A., Savolainen, I., Koike, M., & Oksanen, A. (2025). A four-wave longitudinal study on attitudes toward the use of AI in different domains—The self-determination theory and locus of control perspective. *Telematics and Informatics Reports*, *18*, 100220. https://doi.org/10.1016/j.teler.2025.100220

Čačić, S. i Gavrilov-Jerković, V. (2013). Kognitivno-afektivni regulatorni mehanizmi kao medijatori između dimenzija afektivne vezanosti i depresije. *Primenjena psihologija*, *6*, 358–405.

Davidović Rakić, J., Popović, E., & Minić, J. (2024). Anxiety related to artificial intelligence among educators in the Republic of Serbia. *International Conference Education and Artificial Intelligence (EDAI 2024): Book of Abstracts* (p. 20). Vranje: Pedagogical Faculty in Vranje, University of Niš.

Devaraj, S., Easley, R. F., & Crant, J. M. (2008). Research note: How does personality matter? Relating the Five-Factor Model to technology acceptance and use. *Information Systems Research*, *19*(1), 93–105. https://doi.org/10.1287/isre.1070.0153

Duan, H., & Zhao, W. (2024). The effects of educational artificial intelligence-powered applications on teachers' perceived autonomy, professional development for online teaching, and digital burnout. *International Review of Research in Open and Distributed Learning*, *25*(3), 57–76. https://doi.org/10.19173/irrodl.v25i3.7659

Fletcher, D., & Sarkar, M. (2013). Psychological resilience: A review and critique of definitions, concepts, and theory. *European Psychologist*, *18*(1), 12–23. https://doi.org/10.1027/1016-9040/a000124

Gayed, J. M. (2025). Educators' perspective on artificial intelligence: Equity, preparedness, and development. *Cogent Education*, *12*(1), 2447169. https://doi.org/10.1080/2331186X.2024.2447169

Gessl, A. S., Schlögl, S., & Mevenkamp, N. (2019). On the perceptions and acceptance of artificially intelligent robotics and the psychology of the future elderly. *Behaviour & Information Technology*, *38*(11), 1068–1087. https://doi.org/10.1080/0144929X.2019.1566499

Goldberg, L. M., Sweeney, D., Meranda, P. F., & Hughes, J. E., Jr. (1996). The Big-Five factor structure as an integrative framework: An analysis of Clarke's AVA model. *Journal of Personality Assessment*, *66*, 441–471.

Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, *37*(6), 504–528. https://doi.org/10.1016/S0092-6566(03)00046-1

Gu, Q., & Day, C. (2007). Teacher's resilience: A necessary condition for effectiveness. *Teaching and Teacher Education*, *23*(8), 1302–1316. https://doi.org/10.1016/j.tate.2006.06.006semanticscholar.org+6

Hopcan, S., Türkmen, G., & Polat, E. (2023). Exploring the artificial intelligence anxiety and machine learning attitudes of teacher candidates. *Education and Information Technologies*, *28*(1), 765–782. https://doi.org/10.1007/s10639-023-12086-9

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big-Five Inventory-Version 4a and 54*. Berkeley, CA: Berkeley Institute of Personality and Social Research, University of California.

John, O. P., & Srivastava, S. (1999). The Big Five Trait taxonomy: History, measurement, and theoretical perspectives. In: L. A. Pervin & O. P. John (Eds.), *Handbook of Personality: Theory and Research*, 2nd ed. (pp. 102–138). New York: Guilford Press.

Judge, T. A., & Bono, J. E. (2001a). A rose by any other name: Are self-esteem, generalized self-efficacy, neuroticism, and locus of control indicators of a common construct? In: B. W. Roberts & R. Hogan (Eds.), *Personality Psychology in the Workplace* (pp. 93–118). Washington, DC: American Psychological Association. https://doi.org/10.1037/10434-004

Judge, T. A., & Bono, J. E. (2001b). Relationship of core self-evaluations traits—self-esteem, generalised self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, *86*(1), 80–92. https://doi.org/10.1037/0021-9010.86.1.80

Kasinidou, M., Kleanthous, S., & Otterbacher, J. (2024). "Artificial intelligence is a very broad term": How educators perceive Artificial Intelligence?. In: *GoodIT '24: Proceedings of the 2024 International Conference on Information Technology for Social Good* (pp. 315–323). New York, NY: Association for Computing Machinery. https://doi.org/10.1145/3677525.3678677

Kim, L. E., Jörg, V., & Klassen, R. M. (2019). A meta-analysis of the effects of teacher personality on teacher effectiveness and burnout. *Educational Psychology Review*, *31*(1), 163–195. https://doi.org/10.1007/s10648-018-9458-2

Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, *19*(3), 192–207. https://doi.org/10.1080/02678370500297720

Larsen, R. J., & Buss, D. M. (2008). *Psihologija ličnosti*. Jastrebarsko: Naklada Slap.

Li, J., & Huang, J.-S. (2020). Dimensions of artificial intelligence anxiety based on integrated fear acquisition theory. *Technology in Society*, *63*, 101410. https://doi.org/10.1016/j.techsoc.2020.101410

Liu, Z., Li, Y., Zhu, W., He, Y., & Li, D. (2022). A meta-analysis of teachers' job burnout and Big Five personality traits. *Frontiers in Education*, *7*. https://doi.org/10.3389/feduc.2022.822659

Mansfield, C. F., Beltman, S., Weatherby-Fell, N., & Broadley, T. (2016). Building resilience in teacher education: An evidence-informed framework. *Teaching and Teacher Education*, *54*, 77–87. https://doi.org/10.1016/j.tate.2015.11.016

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, *2*(2), 99–113. https://doi.org/10.1002/job.4030020205

Maslach, C., & Leiter, M. P. (2016). Burnout: A multidimensional perspective. In: G. Fink (Ed.), *Stress: Concepts, Cognition, Emotion, and Behavior* (pp. 351–357). Amsterdam: Elsevier. https://doi.org/10.1016/B978-0-12-800951-2.00044-3

Montag, C., Schulz, P. J., Zhang, H., & Li, B. J. (2025). On pessimism aversion in the context of artificial intelligence and locus of control: Insights from an international sample. *AI & Soc*, *40*, 3349–3356. https://doi.org/10.1007/s00146-025-02186-0

Ng, T. W. H., Sorensen, K. L., & Eby, L. T. (2006). Locus of control at work: A meta-analysis. *Journal of Organizational Behavior*, *27*(8), 1057–1087. https://doi.org/10.1002/job.416

Park, J., & Woo, S. E. (2022). Who likes artificial intelligence? Personality predictors of attitudes toward artificial intelligence. *The Journal of Psychology*, *156*(1), 68–94. https://doi.org/10.1080/00223980.2021.2012109

Pham, S. T. H., & Sampson, P. M. (2022). The development of artificial intelligence in education: A review in context. *Journal of Computer Assisted Learning*, *38*(5), 1312–1330. https://doi.org/10.1111/jcal.12687

Pichlbauer, M. (2024). *Einfluss der Persönlichkeitsvariable „Locus of Control" auf das Vertrauen in KI-Systeme* (Master's thesis). University of Applied Sciences Upper Austria, School of Management, Steyr, Austria. https://epub.jku.at/obvulihs/content/titleinfo/10518655

Polak, S., Schiavo, G., & Zancanaro, M. (2022). Teachers' perspective on artificial intelligence education: An initial investigation. In: *CHI Conference on Human Factors in Computing Systems Extended Abstracts (CHI '22 Extended Abstracts, April 29–May 5, 2022, New Orleans, LA, USA)* (pp. 1–7). New York, NY: Association for Computing Machinery (ACM). https://doi.org/10.1145/3491101.3519866

Polat, E. (2025). Artificial intelligence literacy, lifelong learning, and fear of innovation: Identification of profiles and relationships. *Education and Information Technologies*, *30*, 20183–20214. https://doi.org/10.1007/s10639-025-13548-y

Polat, D. D., & İskender, M. (2018). Exploring teachers' resilience in relation to job satisfaction, burnout, organizational commitment and perception of organizational climate. *International Journal of Psychology and Educational Studies*, *5*(3), 1–13. https://doi.org/10.17220/ijpes.2018.03.001

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*, 879–891. https://doi.org/10.3758/BRM.40.3.879

Rajović, R., Davidović Rakić, J. i Erdeš Kavečan, Đ. (2021). Sagorevanje i zadovoljstvo životom prosvetnih radnika u Sloveniji u uslovima krize izazvane pandemijom Kovid 19. U: Z. Arsić (ur.), *Psihologija katastrofa, vanredno stanje i njihov efekat na zdravlje* (str. 331–357). Kosovska Mitrovica: Filozofski fakultet Univerziteta u Prištini sa privremenim sedištem u Kosovskoj Mitrovici.

Rehman, A. U., Mahmood, A., Bashir, S., & Iqbal, M. (2024). Technophobia as a technology inhibitor for digital learning in education: A systematic literature review. *Journal of Educators Online*, *21*(1), 1–20. https://doi.org/10.9743/JEO.2024.21.1.1

Richards, K. A. R., Levesque-Bristol, C., Templin, T. J., & Graber, K. C. (2016). The impact of resilience on role stressors and burnout in elementary and secondary

teachers. *Social Psychology of Education*, *19*(3), 511–536. https://doi.org/10.1007/s11218-016-9346-x

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, *80*(1), 1–28. https://doi.org/10.1037/h0092976

Schepman, A., & Rodway, P. (2023). The General Attitudes Towards Artificial Intelligence Scale (GAAIS): Confirmatory validation and associations with personality, corporate distrust, and general trust. *International Journal of Human-Computer Interaction*, *39*(13), 2724–2741. https://doi.org/10.1080/10447318.2022.2085400

Schwab, R. L., Jackson, S. E., & Schuler, R. S. (1986). Educator burnout: Sources and consequences. *Educational Research Quarterly*, *10*(3), 14–30.

Sharan, N. N., & Romano, D. M. (2020). The effects of personality and locus of control on trust in humans versus artificial intelligence. *Heliyon*, *6*(8), e04572. https://doi.org/10.1016/j.heliyon.2020.e04572

Silagan, B. L., & Tumapon, T. (2025). Technological competence, training and support, attitude towards AI, and teachers' acceptance. *SSRN*. https://doi.org/10.2139/ssrn.5250301

Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, *26*(4), 1059–1069. https://doi.org/10.1016/j.tate.2009.11.001

Skaalvik, E. M., & Skaalvik, S. (2020). Teacher burnout: Relations between dimensions of burnout, perceived school context, job satisfaction and motivation for teaching. A longitudinal study. *Teachers and Teaching*, *26*(7–8), 602–616. https://doi.org/10.1080/13540602.2021.1913404

Slišković, A. i Burić, I. (2018). Kratka skala otpornosti. U: A. Slišković, I. Burić, V. Ćubela Adorić, M. Nikolić i I. Tucak Junaković, (ur.), *Zbirka psihologijskih skala i upitnika, Svezak 9* (str. 7–12). Zadar: Sveučilište u Zadru.

Slišković, A., Gregov, Lj. i Tokić, A. (2014). Spektorova skala radnog lokusa kontrole. U: V. Ćubela Adorić, Z. Penezić, A. Proroković i I. Tucak Junaković (ur.), *Zbirka psihologijskih skala i upitnika, Svezak 7* (str. 57–64). Zadar: Sveučilište u Zadru.

Smederevac, S. i Mitrović, D. (2018). *Ličnosti – metodi i modeli*. Beograd: Centar za primenjenu psihologiju.

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*(3), 194–200. https://doi.org/10.1080/10705500802222972

Spector, P. E. (1988). Development of the Work Locus of Control Scale. *Journal of Occupational Psychology*, *61*(4), 335–340. https://doi.org/10.1111/j.2044-8325.1988.tb00470.x

Stănescu, D. F., & Romaşcanu, M. C. (2024). The influence of AI anxiety and neuroticism on attitudes toward artificial intelligence. *European Journal of Sustainable Development*, *13*(4), 191–202. https://doi.org/10.14207/ejsd.2024.v13n4p191

Swider, B. W., & Zimmerman, R. D. (2010). Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational Behavior*, *76*(3), 487–506. https://doi.org/10.1016/j.jvb.2010.01.003

Tabachnick, B. G., & Fidell, L. S. (2021). *Using Multivariate Statistics*, 7th ed. Boston: Pearson.

Tugade, M., & Fredrickson, B. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, *86*, 320–333. https://doi.org/10.1037/0022-3514.86.2.320

Tusaie, K., & Dyer, J. (2004). Resilience: A historical review of the construct. *Holistic Nursing Practice*, *18*(1), 3–10.

Wang, Y. Y., & Wang, Y. S. (2019). Development and validation of an artificial intelligence anxiety scale: An initial application in predicting motivated learning behavior. *Interactive Learning Environments*, *30*(4), 619–634. https://doi.org/10.1080/10494820.2019.1674887

Weitzel, E. C., Löbner, M., Glaesmer, H., Hinz, A., Zeynalova, S., Henger, S., Engel, C., Reyes, N., Wirkner, K., Löffler, M., & Riedel-Heller, S. G. (2022). The association of resilience with mental health in a large population-based sample (LIFE-Adult-Study). *International Journal of Environmental Research and Public Health*, *19*(23), 15944. https://doi.org/10.3390/ijerph192315944

Windle, G. (2010). What is resilience? A systematic review and concept analysis. *Reviews in Clinical Gerontology*, *21*(2), 152–169. https://doi.org/10.1017/S0959259810000420

Yin, W., Ren, G., & Zhang, G. (2025). Mediating and moderating roles of AI literacy: How it shapes the impacts of psychological resilience on work stress and job burnout among young university teachers in China. *Computers and Education: Artificial Intelligence*, *6*, 100451. https://doi.org/10.1016/j.caeai.2025.100451

Zhang, C., Schießl, J., Plößl, L., Hofmann, F., & Gläser-Zikuda, M. (2023). Acceptance of artificial intelligence among pre-service teachers: A multigroup analysis. *International Journal of Educational Technology in Higher Education*, *20*(1), 49. https://doi.org/10.1186/s41239-023-00420-7

Zhang, Y., & Xiong, P. (2025). Will the application of AI technology in higher education exacerbate teacher burnout? *International Journal of High Speed Electronics and Systems*. Advance online publication. https://doi.org/10.1142/S0129156425408381

стр. 329–353

Јелена И. ДАВИДОВИЋ РАКИЋ
Емилија У. ПОПОВИЋ
Миљана С. ПАВИЋЕВИЋ

Универзитет у Приштини са привременим седиштем у Косовској Митровици
Филозофски факултет
Катедра за психологију
Косовска Митровица (Србија)

# Особине личности и анксиозност у вези са вештачком интелигенцијом код просветних радника у Србији: посредничка улога отпорности, радног локуса контроле и синдрома сагоревања на раду

Резиме

У контексту убрзаног технолошког напретка, посебно у области образовања, све израженија примена вештачке интелигенције отвара питање начина на који индивидуалне психолошке карактеристике утичу на доживљавање и регулацију анксиозности у вези са овим технолошким променама код наставног особља. Циљ овог истраживања био је да се испита да ли отпорност, радни локус контроле и синдром сагоревања на раду посредују у односу између особина личности и нивоа анксиозности у вези са вештачком интелигенцијом код просветних радника у Републици Србији. Истраживање је спроведено на узорку од 324 наставника и професора из основних и средњих школа.

У истраживању су коришћени следећи инструменти: Десетоајтемски инвентар личности (TIPI–10) за процену димензија личности, Кратка скала резилијентности (BRS) за мерење отпорности, Спекторова скала радног локуса контроле (SWLC), Копенхашки инвентар сагоревања (CBI) за процену синдрома сагоревања и Скала анксиозности у вези са вештачком интелигенцијом (AIA).

Резултати показују да особине личности имају ограничен директан утицај на анксиозност у вези са вештачком интелигенцијом. Неуротицизам доприноси вишим нивоима анксиозности индиректно, путем спољашњег радног локуса контроле и синдрома сагоревања на раду. Насупрот томе, савесност и отпорност делују заштитно, јер умањују синдром сагоревања и јачају унутрашњи радни локус контроле, који се показују као значајни предиктори ниже анксиозности у вези са вештачком интелигенцијом. Ови налази указују на значај јачања унутрашњих психолошких капацитета просветних радника у процесу прилагођавања условима образовног система који се непрестано и често непредвидиво мења.

*Кључне речи:* особине личности; отпорност; радни локус контроле; синдром сагоревања на раду; вештачка интелигенција; анксиозност; просветни радници.