

Teachers' Psychological Literacy in Practice

Lucia Rapsová, Constantine the Philosopher University in Nitra, Slovakia
Katarína Grznárová, Constantine the Philosopher University in Nitra, Slovakia

The Barcelona Conference on Education 2025
Official Conference Proceedings

Abstract

Psychological literacy is one of the most important literacies of the 21st century, and it is crucial to include it in the primary outcomes of undergraduate training for future teachers. This study aimed to determine the levels and differences in psychological literacy among teachers at different levels of education (kindergarten teachers, primary school teachers at the first degree of education, primary school teachers at the second degree of education, secondary school teachers, and school directors). The research sample consisted of 180 teachers working in kindergartens, primary and secondary schools in the Slovak Republic, aged 20-64 ($M = 44.61$; $SD = 10.50$). We measured psychological literacy using several scales covering selected components of psychological literacy - psychological misconceptions (Psychological Misconceptions Questionnaire – Rapsová & Ballová Mikušková, manuscript in preparation), dispositions for critical thinking – critical openness, reflective scepticism (Critical Thinking Disposition Scale CTDS – Sosu, 2013), trust in science (Credibility of Science Scale CSS – Hartman, 2017), integrity (Integrity Scale IS - Schlenker, 2008). We used a one-factor analysis of variance (ANOVA) to verify the differences between the groups, and we found statistically significant differences in the trust in science component ($F(4, 175) = 2.67, p = .014$) and the integrity component ($F(4, 175) = 3.8, p = .018$). Post hoc analysis (Tukey HSD) showed that primary school teachers at the first degree of education scored significantly lower on trust in science ($p = .014$) and integrity ($p = .009$) than secondary school teachers. The results point to the need to develop psychological literacy tailored to teachers' professional focus. They support the inclusion of the construct of psychological literacy in the undergraduate preparation of teacher students and in the further education of teachers in practice.

Keywords: psychological literacy, psychological misconceptions, critical thinking dispositions, trust in science, integrity, teacher

iafor

The International Academic Forum
www.iafor.org

Introduction

As teachers are in direct contact with pupils, influencing, shaping, and developing their personalities, they must possess the knowledge, skills, and abilities that predestinate them for high-quality performance in this profession (Rapsová, 2021). In line with the increasing demands on the teaching profession, teachers should be experts not only in pedagogy but also in psychology. In this context, we can talk about a psychologically literate teacher.

Since its first definition, psychological literacy has been associated with psychology students and the psychological profession. However, Hakim (2015) points out that psychological literacy is not only the privilege of the psychological profession but is also necessary for the teaching profession. Throuvala et al. (2021) highlight the importance of pupils' healthy psychological development. They argue that teachers' lack of psychological knowledge and, consequently, their incorrect educational practices can affect or even disrupt the mental health of pupils. Cranney et al. (2022) also discuss the increased need for psychological education in the helping professions. According to the authors, this urgency became evident in the post-COVID period, which has brought with it many emotional and social problems, a growing prevalence of mental disorders, deepening social and economic inequalities, and an increased need for universities to produce flexible graduates. According to the authors, psychological education can help address these problems. Kosíková (2011), Sokolová et al. (2014) point out that teacher education should focus more on the development of competences and new literacies, especially psychological literacy. Hulme & Cranney (2021) and Cranney et al. (2022) consider psychological literacy one of the most essential literacies of the 21st century and argue that it should be the primary outcome of university education. In agreement, Pownall et al. (2022) state that psychological literacy can enhance performance quality in the helping professions. They see this benefit mainly in professional knowledge related to the experiences and behaviour of individuals, in research skills, and in the application of ethical principles (not only) in research.

It has not yet been determined whether to use a single scale to measure psychological literacy or multiple measurement methods to assess its individual components. Chester et al. (2013) recommend assessing psychological literacy by measuring its individual components outlined by McGovern et al. (2010). Based on the recommendations of Chester et al. (2013), Roberts et al. (2015) conducted a study in which they measured psychological literacy using several questionnaires that mapped the individual components of psychological literacy. Inspired by this research, we identified psychological misconceptions, critical thinking dispositions, trust in science, and integrity as key components of psychological literacy.

Psychological misconceptions are often defined as widespread beliefs that contradict established evidence (Gardner & Brown, 2013) and lack empirical support (Hughes et al., 2015). Individuals form misconceptions based on personal experience or through misinformation promoted by the media or the general public. However, this information is not consistent with basic psychological concepts, theories, and current empirical evidence (Tulis, 2022).

Dispositions for critical thinking examine the tendency to do something (Ennis, 1996) or the way individuals approach a task (Ku & Ho, 2010, cited in Sosu, 2013). Facione et al. (1995) define dispositions for critical thinking as a set of attitudes, intellectual virtues, or habits of mind that describe the way an individual reasons, argues, and makes decisions. Sosu (2013) discusses two dispositional domains in relation to critical thinking dispositions: critical

openness and reflective scepticism. He understands critical openness as the ability to modify one's opinions and thinking in response to convincing evidence, and reflective scepticism is the ability to critically evaluate information, question evidence, and learn from past experiences.

Another component of psychological literacy is trust in science. Wintterlin et al. (2022) define trust in science as the willingness of an individual or group to rely on science, scientists (as representatives of the system), and empirical evidence, despite a limited understanding of science and the risk of not reaching the "truth".

Integrity is the last indicator of psychological literacy in our research. In general, we can understand integrity as a person's inner wholeness. It is considered the basis for optimal personality functioning (Nábělková & Kahancová, 2013). According to Schlenker (2008), it represents a more substantial personal commitment to moral identity, which positively influences interpersonal relationships. Moreover, adherence to ethical principles helps resist the temptation to engage in illegal activities. According to the aforementioned author, integrity also includes a person's unwillingness to violate their principles, regardless of temptations or others' preferences. The attributes of integrity include principledness (holding clear values and acting in accordance with them), honesty (truthfulness, veracity, trustworthiness), concern for others (care, kindness, empathy, unselfishness), and reliability (Aquino & Reed, 2002). These indicators are consistent with Schlenker's understanding (2008).

Psychological literacy is a crucial part of teachers' professional competence, shaping the quality of the educational process and pupils' psychological well-being. Examining its level among different groups of teachers provides a better understanding of how psychological literacy manifests itself and how teachers apply it in pedagogical practice. At the same time, it provides insights that can optimise teacher training and the targeted development of their psychological competences.

The research aimed to determine the levels and differences in selected components of psychological literacy among teachers at different levels of education: kindergarten teachers, primary school teachers at the first degree of education, primary school teachers at the second degree of education, secondary school teachers, and school directors.

Methodology

A total of 180 Slovak teachers working in schools participated in the study. Our research sample shows a significant predominance of women (93%), a feature specific to the teaching profession – its feminisation. The predominance of women corresponds to the representation of women in the Slovak educational system. Participants' ages ranged from 20 to 64 years ($M = 44.61$; $SD = 10.50$). We administered the test battery to school directors and teachers at different levels of education. The most significant proportion of the research sample consisted of secondary school teachers ($N = 45$) and primary school teachers at the second degree of education ($N = 40$). Primary school teachers at the first degree of education ($N = 35$), school directors ($N = 41$) and kindergarten teachers ($N = 29$) also participated in the research. We asked participants to take part in the research via an email sent to the school directors of all kindergartens, primary and secondary schools in Slovakia. We obtained the relevant email addresses from freely available information provided by the Slovak Centre for Scientific and Technical Information. We conducted the research online via the Survio platform, and we collected the data in the spring of 2025. Participants signed a consent form to participate in the

research. The study was conducted in accordance with the ethical principles established by the American Psychological Association.

In terms of psychological literacy, we focused on measuring its selected components: psychological misconceptions and dispositions towards critical thinking – critical openness, reflective scepticism, trust in science, and integrity.

To assess belief in psychological misconceptions, we used the Psychological Misconceptions Questionnaire (Rapsová & Ballová Mikušková, manuscript in preparation), which was compiled from statements from the questionnaires by Tulis (2022) and McAfee and Hoffman (2021). The questionnaire contains 25 items, each of which collects individual psychological information that professionals and the lay public often present. Some of the psychological knowledge presented is true, while other statements are false and represent common misconceptions about psychological knowledge or its incorrect interpretations. Participants' task is to evaluate the statements on a 5-point scale (*1 – strongly disagree, 2 – disagree, 3 – no opinion, 4 – agree, 5 – strongly agree*). A higher score indicates a stronger belief in psychological myths.

We measured critical thinking dispositions using the Critical Thinking Disposition Scale – CTDS (Sosu, 2013). The scale contains 11 items – statements that participants rate on a 5-point scale (*1 – strongly disagree, 2 – disagree, 3 – no opinion, 4 – agree, 5 – strongly agree*). Participants evaluate each statement in relation to themselves and their behaviour. The items focus on two dispositional domains – critical openness (7 items) and reflective scepticism (4 items) – that underpin critical thinking ability. Reflective scepticism is understood here as an individual's ability to view information critically, question evidence and learn from past experiences. On the other hand, the domain of critical openness is the ability to modify one's opinions and thinking in response to convincing evidence. A higher average score indicates greater critical openness and reflective scepticism.

We used a modified version of the Credibility of Science Scale CSS (Hartman, 2017) to measure trust in science. The scale consists of six statements, with participants indicating their degree of agreement or disagreement on a 5-point scale (*1 – strongly disagree, 2 – disagree, 3 – no opinion, 4 – agree, 5 – strongly agree*). The modification of the tool consists of reducing the 7-point scale to a 5-point scale, which is considered more efficient (Hartman, 2017). The higher the participants' average scores, the greater their trust in science.

We measured integrity using the Integrity Scale IS (Schlenker, 2008), which consists of 18 items formulated as statements. Participants express their level of agreement or disagreement with the statements on a 5-point scale (*1 – strongly disagree, 2 – disagree, 3 – no opinion, 4 – agree, 5 – strongly agree*). The integrity scale focuses on identifying attitudes and personality traits that predict desired ethical behaviour and thus lead to greater psychological well-being, better stress management, and effective functioning within the social system. A higher score on the integrity dimension indicates a more substantial presence of integrity traits in the personality.

Results

Table 1 provides descriptive statistics for the indicators of psychological literacy (psychological misconceptions, critical openness, reflective scepticism, trust in science, and integrity) identified by us in teachers in practice.

The results show that, in practice, teachers tend to hold stronger beliefs in psychological misconceptions. However, there are only slight differences in preferences between the teacher groups.

When measuring the dispositional domains of critical thinking – critical openness and reflective scepticism - we found high average values in both dispositions across all teacher groups, ranging around the level four (on a five-point scale). School directors and primary school teachers at the first degree of education achieved the highest values in both domains.

Secondary school teachers expressed the highest level of trust in science. Primary school teachers at the second degree of education and school directors achieved slightly lower average scores. Kindergarten teachers showed a medium level of trust in science. In contrast, primary school teachers at the first degree of education achieved the lowest scores, indicating relatively weaker trust in science than other groups.

Descriptive analysis showed an average to higher level of integrity among teachers in practice. The highest scores were achieved by secondary school teachers, indicating the most integrity-oriented behaviour. Subsequently, school directors and primary school teachers at the second degree of education followed with slightly above-average scores. Kindergarten teachers showed a medium level of integrity, while primary school teachers at the first degree of education achieved the lowest scores among the teacher groups.

Table 1

Descriptive Statistics of Psychological Literacy Among Teachers in Practice

		M	SD	min	max
PMC	kindergarten teacher	3.22	0.28	2.72	3.76
	primary school teacher at the first degree	3.21	0.34	2.28	3.92
	primary school teacher at the second degree	3.22	0.31	2.56	3.80
	secondary school teacher	3.20	0.30	2.44	3.88
	school director	3.25	0.25	2.68	3.84
CTDS_CO	kindergarten teacher	4.18	0.67	3.00	5.00
	primary school teacher at the first degree	4.32	0.46	3.43	5.00
	primary school teacher at the second degree	4.21	0.53	3.00	5.00
	secondary school teacher	4.30	0.48	3.43	5.00
	school director	4.45	0.45	3.14	5.00
CTDS_RS	kindergarten teacher	4.26	0.72	2.75	5.00
	primary school teacher at the first degree	4.36	0.67	2.25	5.00
	primary school teacher at the second degree	4.29	0.56	3.00	5.00
	secondary school teacher	4.22	0.63	2.50	5.00
	school director	4.42	0.52	3.00	5.00
ST	kindergarten teacher	3.62	0.82	2.17	5.00
	primary school teacher at the first degree	3.39	0.85	1.00	5.00
	primary school teacher at the second degree	3.97	0.91	1.00	5.00
	secondary school teacher	4.40	0.88	2.00	5.00
	school director	3.82	1.80	1.50	5.00
I	kindergarten teacher	3.78	0.51	2.73	4.79
	primary school teacher at the first degree	3.66	0.45	2.71	4.57
	primary school teacher at the second degree	3.83	0.42	3.70	4.80
	secondary school teacher	4.20	0.43	2.93	4.80
	school director	3.89	0.55	2.93	4.80

Note. PMC – psychological misconceptions, CTDS_CO – disposition towards critical thinking – critical openness, CTDS_RS – disposition towards critical thinking – reflective scepticism, ST – trust in science, I – integrity, M – mean, SD – standard deviation, min – minimum, max – maximum

Based on the data analysis, a one-factor analysis of variance (ANOVA) was used to test for differences among individual positions in the teaching profession across selected components of psychological literacy (Table 2). The results showed that there were no statistically significant differences between the groups in the components of psychological literacy — psychological misconceptions, critical openness, and reflective scepticism. All groups achieved comparable scores in understanding psychological concepts, openness to new information, and the ability to reflect critically on the reliability of knowledge. Therefore, we can assume that these attributes of psychological literacy are relatively stable across educational levels and are not significantly influenced by job position. However, we found a statistically significant difference in the trust in science (ST) component, $F(4, 175) = 2.67$, $p = .014$. Post hoc analysis (Tukey HSD) showed that primary school teachers at the first degree of education achieved significantly lower scores in trust in science than secondary school teachers ($p = .014$). A similar trend was evident in the integrity (I) component, where group differences were also statistically significant, $F(4, 175) = 3.8$, $p = .018$. Post hoc analysis confirmed that primary school teachers at the first degree of education achieved significantly lower integrity scores than secondary school teachers ($p = .009$). We present post hoc comparisons (Tukey HSD) between positions in the teaching profession in the psychological literacy components of trust in science and integrity in Table 3.

Table 2

Results of One-Factor Analysis of Variance (Anova) for Components of Psychological Literacy by Position in the Teaching Profession

Positions in the teaching profession	F(4, 175) p	Components of psychological literacy				
		PMC	CTDS_CO	CTDS_RS	ST	I
		0.10	1.34	0.57	2.67	3.80
		.982	.257	.683	.014*	.018*

Note. PMC – psychological misconceptions, CTDS_CO – disposition towards critical thinking – critical openness, CTDS_RS – disposition towards critical thinking – reflective scepticism, ST – trust in science, I – integrity, $F(df_1, df_2)$ – value of the test statistic of one-factor analysis of variance (ANOVA), where df_1 represents degrees of freedom between groups and df_2 degrees of freedom within groups; p – level of statistical significance, * $p < .05$

Table 3

Post Hoc Comparisons Between Positions in the Teaching Profession in the Components of Psychological Literacy – Trust in Science and Integrity

Component PL	Comparison of positions in the teaching profession		MD	p Tukey	Cohen's d
ST	kindergarten teacher	primary school teacher at the first degree	0.22	0.862	0.25
		primary school teacher at the second degree	-0.35	0.507	-0.39
		secondary school teacher	-0.43	0.277	-0.47
		school director	-0.21	0.902	-0.23
	primary school teacher at the first degree	primary school teacher at the second degree	-0.58	0.052	-0.63
		secondary school teacher	-0.65	0.014*	-0.72
		school director	-0.43	0.306	-0.48
	primary school teacher at the second degree	secondary school teacher	-0.08	0.995	-0.09
	secondary school teacher	school director	0.14	0.964	0.16
		school director	0.22	0.833	0.24
I	kindergarten teacher	primary school teacher at the first degree	0.11	0.873	0.24
		primary school teacher at the second degree	-0.05	0.992	-0.11
		secondary school teacher	-0.24	0.200	-0.51
		school director	-0.11	0.879	-0.24
	primary school teacher at the first degree	primary school teacher at the second degree	-0.16	0.555	-0.35
		secondary school teacher	-0.35	0.009*	-0.76
		school director	-0.23	0.286	-0.49
	primary school teacher at the second degree	secondary school teacher	-0.19	0.340	-0.41
	secondary school teacher	school director	-0.06	0.980	-0.14
		school director	0.13	0.775	0.27

Note. PL – psychological literacy, ST – trust in science, I – integrity, MD – Mean Difference – difference in means between groups, p Tukey – level of statistical significance according to Tukey's HSD test, Cohen's d – effect size, * p < .05 – statistically significant difference

Discussion

The study focused on determining the levels and differences in psychological literacy among Slovak teachers in practice and school directors at various levels of education – kindergarten teachers, primary school teachers at the first degree of education, primary school teachers at the second degree of education, secondary school teachers, and headteachers. We measured psychological literacy using several scales covering its selected components (psychological misconceptions, dispositions towards critical thinking – critical openness, reflective scepticism, trust in science, and integrity), as there is currently no single measurement tool for this construct.

Regarding the prevalence of psychological misconceptions among teachers, the results show that, in practice, teachers tend to believe more in psychological myths. We found no statistically significant differences between the groups studied in this component of psychological literacy. Our findings on the relatively high level of belief in psychological misconceptions are also supported by previous studies investigating the prevalence of psychological myths among teachers in practice (Menz et al., 2021; Pieschl et al., 2021; Tulis, 2022). Tulis (2022) found that teacher students and practising teachers show a high level of support for psychological misconceptions. These psychological myths relate directly to the knowledge areas necessary for high-quality performance in the teaching profession. One reason for the high level of support for psychological myths among teachers is mistrust or underestimation of scientific evidence and a preference for unofficial beliefs. Adherence to psychological or other myths can be potentially harmful. Teachers who prefer psychological misconceptions may teach less effectively than those who draw on valid psychological knowledge based on empirical evidence (Bensley et al., 2014). They may then pass these myths on to their own pupils and students, further spreading the myths. For this reason, it is crucial to enrich undergraduate training and further teacher education with professional teaching materials and procedures specifically designed to dispel psychological myths.

In relation to teachers in practice, we focused our attention on their disposition towards critical thinking (critical openness and reflective scepticism). The relatively high average scores in both dispositions, as measured by a self-assessment scale, indicate that teachers are actively open to seeking and applying new ideas. They have no problem changing some of their firmly held beliefs when confronted with convincing evidence. They try to think in a broader context, so they need to understand other people's views on a given issue. To form a comprehensive view, they seek out multiple reliable sources of information. They tend to justify their decisions and think about their broader implications before taking action. They often re-evaluate their experiences and actions in order to learn from them or improve them.

These results indicate that the teachers in the studied sample have relatively strong dispositional predispositions toward critical thinking, an essential element of psychological literacy. The ability to reflect on one's own beliefs, openness to new information, and willingness to revise one's attitudes are crucial not only to teachers' personal and professional development but also to their pupils' development. The levels of these dispositions varied minimally across the teacher groups, suggesting these domains are relatively stable characteristics. From a pedagogical practice perspective, these findings support the need to develop critical thinking during the preparation of future teachers systematically and to reinforce it through further professional development.

In summary, the results showed that there were no statistically significant differences between the groups in the components of psychological literacy – psychological misconceptions, critical openness, and reflective scepticism. All groups achieved comparable scores in understanding psychological concepts, openness to new information, and the ability to reflect critically on the reliability of knowledge. Therefore, we can assume that these attributes of psychological literacy are relatively stable across levels of education and are not significantly influenced by job position. We think that these components are formed more through long-term professional and personal development than through dependence on the position in the teaching profession to which teachers belong.

However, data analysis revealed significant differences between primary school teachers at the first degree of education and secondary school teachers in two components of psychological literacy: trust in science and integrity. Primary school teachers at the first degree of education achieved significantly lower scores in trust in science and integrity than secondary school teachers. Higher trust in science among secondary school teachers reflects a stronger identification with science and rational thinking. Their professional activity is closely linked to teaching subjects (e.g., natural sciences, social sciences, technical sciences), in which it is vital to apply scientific knowledge systematically. It is therefore likely that these teachers follow new professional and scientific information, either to update the curriculum or because their students require a deeper, more up-to-date explanation of phenomena. This fact may support their positive attitude towards science and its credibility. Conversely, primary school teachers at the first degree of education may be more focused on the didactic and pedagogical aspects of teaching than on scientific content. Their primary task is to develop pupils' basic knowledge, social skills, and motivation, thereby reducing the need to reflect on scientific knowledge.

The same pattern of differences was also evident in the integrity component. We can understand the significantly higher integrity among secondary school teachers in the context of professional identity and ethical self-perception. Secondary school teachers often face moral and value dilemmas. At the same time, they act as value and moral role models for older pupils, which requires consistency between beliefs, values and behaviour, as well as their willingness to act in accordance with internal ethical principles under challenging situations – i.e. integrity in its broader sense. Higher integrity may also be associated with greater autonomy in decision-making, which is generally higher among higher education teachers than among primary school teachers at the first degree of education. In our opinion, both components (trust in science and integrity) share a common root in reflective and value-oriented thinking. We can assume that teachers who are more open to scientific thinking and trust science more also tend to act consistently and responsibly because they perceive the world as predictable, rationally organised and value-anchored. The results may point to different conditions in the teaching profession across levels of education – higher levels place greater emphasis on academic values, autonomy, and critical thinking. In comparison, lower levels are more oriented towards the educational aspect. Another likely explanation for the differences observed is the differing structures and orientations of undergraduate teacher preparation. While the curriculum for secondary school teachers is more oriented towards subject-specific content and the scientific basis of subjects (e.g., psychology, biology, physics), primary school teachers at the first degree of education have undergraduate training that is more pedagogically oriented, leading to a stronger educational orientation but less scientific reflection. Another factor influencing the differences found may be the different nature of professional experience. Secondary school teachers more often engage in discussions with pupils who critically reflect on the world and ask questions about sources of knowledge, thereby forcing teachers to rely on facts and scientific arguments. At the same time, working with adolescents and teenagers often involves

addressing moral and ethical dilemmas, which can naturally strengthen a teacher's integrity. On the contrary, primary school teachers at the first degree of education deal more with the emotional and developmental needs of children and pupils. While this requires empathy and pedagogical ethics, it does not necessarily require scientific and value-reflective thinking to the same extent. Teachers' personality and cognitive predispositions can also explain significant differences between these teacher groups. We can assume that teachers inclined towards theoretical and analytical thinking are more likely to choose a career path (in subjects taught in secondary schools) where scientific knowledge is a priority.

Conclusion

In conclusion, differences in trust in science and integrity between teacher groups are not only a consequence of their position in the teaching profession, but also a combination of several of the above-mentioned factors that can interact and reinforce one another. The results point to the need for further research into the factors that influence scientific thinking, trust in science, value attitudes and the ethical identity of teachers. Future research could focus on long-term changes in trust in science and integrity depending on the length of teaching experience, professional identity and the stage of life of the teacher. It would be beneficial to verify the effectiveness of educational programmes and interventions that promote scientific evidence, critical thinking, and ethical decision-making.

The findings of our research highlight the significant challenge of implementing fundamental changes in the undergraduate preparation of teacher students and in further education of teachers, aimed at the efficient development of their psychological literacy. The development of psychological literacy also strengthens teachers' professional competences, which significantly impact the quality of the educational process, pupils' learning outcomes, their motivation to learn, and the school climate. The benefits of psychological literacy extend beyond professional life to personal and social life. Individuals with developed psychological literacy can critically evaluate psychological knowledge and apply it to their own experiences and behaviour, as well as to those of others in various life situations. In this way, they improve their quality of life and, to a certain extent, also help to improve life in the community in which they live (Rapsová, 2024).

Acknowledgements

The study was supported by the Scientific Grant Agency of the Ministry of Education, Research, Development and Youth of the Slovak Republic as part of the VEGA 1/0255/24 project "*Professional Competences and Psychological Literacy of Teachers*".

References

- Aquino, K., & Reed, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83(6), 1423–1440.
- Bensley, D. A., Lilienfeld, S. O., & Powell, L. A. (2014). A new measure of psychological misconceptions: Relations with academic background, critical thinking, and acceptance of paranormal and pseudoscientific claims. *Learning and Individual Differences*, 36, 9–18.
- Chester, A., Burton, L. J., Xenos, S., & Elgar, K. (2013). Peer mentoring: Supporting successful transition for first year undergraduate psychology students. *Australian Journal of Psychology*, 65(1), 30–37.
- Cranney, J., Dunn, D. S., Hulme, J. A., Nolan, S., Morris, S., & Norris, K. (2022). Psychological Literacy and Undergraduate Psychology Education: An International Provocation. *Frontiers in Education*, 7, 1–7.
- Ennis, R. H. (1996). Critical thinking dispositions: Their nature and assessability. *Informal Logic*, 18(2-3), 165–182.
- Facione, P. A., Sanchez, C. A., Facione, N. C., & Gainen, J. (1995). The dispositions towards critical thinking. *Journal of General Education*, 44(1), 1–25.
- Gardner, R. M., & Brown, D. L. (2013). A test of contemporary misconceptions in psychology. *Learning and Individual Differences*, 24, 211–215.
- Hakim, A. (2015). Contribution of Competence Teacher (Pedagogical, Personality, Professional Competence and Social) on the Performance of Learning. *The International Journal of Engineering And Science*, 4(2), 1–12.
- Hartman, R. O. (2017). Modeling Attitudes Toward Science: Development and Validation of the Credibility of Science Scale. *Basic and Applied Social Psychology*, 39(6), 358–371.
- Hughes, S., Lyddy, F., Kaplan, R., Nichols, A. L., Miller, H., Saad, C. G., Dukes, K., & Lynch, A. J. (2015). Highly prevalent but not always persistent: Undergraduate and graduate student's misconceptions about psychology. *Teaching of Psychology*, 42(1), 34–42.
- Hulme, J. A., & Cranney, J. (2021). Psychological Literacy and Learning for Life. In J. Zumbach (Eds.), *International Handbook of Psychology Learning and Teaching*. Springer.
- Kosíková, V. (2011). *Psychologie ve vzdělávání a její psychodidaktické aspekty* [Psychology in education and its psychodidactic aspects]. Grada Publishing.
- McAfee, M., & Hoffman, B. (2021). The Morass of Misconceptions: How Unjustified Beliefs Influence Pedagogy and Learning. *International Journal for the Scholarship of Teaching & Learning*, 15(1), 1–16.

- McGovern, T. V., Corey, L., Cranney, J., Dixon, W. E., Jr., Holmes, J. D., Kuebli, J. E., Ritchey, K. A., Smith, R. A., & Walker, S. J. (2010). Psychologically literate citizens. In D. F. Halpern (Eds.), *Undergraduate education in psychology: A blueprint for the future of the discipline* (pp. 9–27). American Psychological Association.
- Menz, C., Spinath, B., & Seifried, E. (2021). Misconceptions die hard: prevalence and reduction of wrong beliefs in topics from educational psychology among preservice teachers. *European Journal of Psychology of Education*, 36(2), 477–494.
- Nábělková, E., & Kahancová, M. (2013). Integrita – verifikácia inventára na jej meranie [Integrity – verification of inventory for its measurement]. *Klinická psychologie a osobnost*, 2(2), 43–53.
- Pieschl, S., Budd, J., Thomm, E., & Archer, J. (2021). Effects of raising student teachers' metacognitive awareness of their educational psychological misconceptions. *Psychology Learning and Teaching*, 20(2), 214–235.
- Pownall, M., Thompson, C., Blundell-Birtill, P., Newell, S. J., & Harris, R. (2022). Does “Psychological Literacy” Feature in Non-Psychology Degrees? A Cross-Discipline Study of Student Perceptions. *Teaching of Psychology*, 51(4), 453–460.
- Rapsová, L. (2021). Influence of the social competence training on personality variables. *Ad Alta*, 11(1), 245–249.
- Rapsová, L. (2024). *Psychologicky gramotný učiteľ* [Psychologically literate teacher]. PF UKF.
- Rapsová, L. & Ballová Mikušková, E. (manuscript in preparation). *Psychological Misconceptions Questionnaire*.
- Roberts, L., Heritage, B., & Gasson, N. (2015). The measurement of psychological literacy: A first approximation. *Frontiers in Psychology*, 6, 1–28.
- Schlenker, B. R. (2008). Integrity and character: Implication of principled and expedient ethical ideologies. *Journal of Social and Clinical Psychology*, 27(10), 1078–1125.
- Sokolová, L., Lemešová, M., & Jursová Zacharová, Z. (2014). *Psychologická príprava budúcich učiteľov a učiteliek: Inovatívne prístupy* [Psychological preparation of future teachers: Innovative approaches]. UK.
- Sosu, E. M. (2013). The development and psychometric validation of a Critical Thinking Disposition Scale. *Thinking Skills and Creativity*, 9, 107–119.
- Throuvala, M. A., Griffiths, M. D., Rennoldson, M., & Kuss, D. J. (2021). Psychosocial Skills as a Protective Factor and Other Teacher Recommendations for Online Harms Prevention in Schools: A Qualitative Analysis. *Frontiers in Education*, 6, 1–16.
- Tulis, M. (2022). Refuting Misconceptions in an Introductory Psychology Course for Preservice Teacher. *Psychology Learning and Teaching*, 21(3), 210–234.

Wintterlin, F., Hendriks, F., Mede, N. G., Bromme, R., Metag, J., & Schäfer, M. S. (2022). Predicting Public Trust in Science: The Role of Basic Orientations Toward Science, Perceived Trustworthiness of Scientists, and Experiences With Science. *Frontiers in Communication*, 6, 1–13.

Contact emails: lrapsova@ukf.sk
kgrznarova@ukf.sk