



# ATTACHMENT AS A PREDICTOR OF INTERACTIVE PSYCHOLOGICAL LITERACY: IMPLICATIONS FOR TEACHER-STUDENT INTERACTION

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## Abstract

*Interactional psychological literacy is an emerging concept in educational disciplines in the contexts of understanding and effectively navigating social and emotional interactions within educational settings. Attachment theory posits that early relationships with caregivers shape an individual's future interactions and relationship patterns. Drawing on these concepts, we were interested in whether future teachers' attachment styles are related to their preferred modes of interaction. The aim of the research was to examine the relations between attachment and the interactional psychological literacy of preservice teachers. To achieve this aim, a survey research strategy of questionnaire instruments was used. Data were collected using the ECR-R questionnaire, which measured attachment styles, and the ISK-K questionnaire, which measured interactional psychological literacy. Eighty second- and third-year undergraduate students of Bachelor of Education in Teaching participated in the study. The findings indicate that the attachment styles of the preservice teachers are predictors of preservice teachers' interactive psychological literacy. This implies that, among other things, it is important to pay attention to the development of interactive psychological literacy regarding relational attachment in the preparation of future teachers. These results contribute to a broader understanding of the challenges of educating and preparing future teachers for practice.*

**Keywords:** attachment styles, interaction styles, teacher-student interaction, psychological literacy, educational outcomes

## Introduction

Attachment is a fundamental aspect of interpersonal relationships because it represents the emotional connection that binds people to each other and creates a sense of security, stability and trust. This concept has been extensively researched, particularly within child development psychology, where it has been shown that good quality attachment between child and caregiver has a profound effect on the development of self-confidence and on the ability to cope with stress and to build positive relationships in adulthood. Without secure and stable attachment, people may experience insecurity, emotional instability or problems with close relationships.

Attachment theory, first developed by Bowlby (1969), highlights the importance of early relationships, particularly between infants and caregivers, in shaping future interpersonal dynamics. Attachment styles—secure, anxious, avoidant and disorganised—are said to influence individuals' ability to form and maintain relationships throughout their lives (Ainsworth et al. 1978). In educational contexts, these styles could profoundly affect teacher-student interactions and the broader social learning environment. Interactive psychological literacy, which refers to an individual's ability to navigate complex social and emotional interactions (Schwebel et al. 2002), is crucial in classroom settings where emotional intelligence and social competence enhance the learning experience.

Interactive psychological literacy involves an individual's ability to understand basic psychological principles and to use them in everyday life to better communicate and manage social interactions. This concept combines elements of emotional intelligence, active listening and understanding of nonverbal expressions, enabling the individual to respond to the needs and emotions of others with greater sensitivity and effectiveness. Interactive psychological literacy allows an individual to create more productive social interactions (Rapsová, 2023). The main tool for this is communication, the effectivity of which is based on mutual understanding or on the correct decoding of signals sent by the other party (Bielešová & Koreňová, 2021).

Sokolová (2013) characterised interactive psychological literacy on two levels: the first is how we perceive ourselves and how we develop; the second is how we perceive others and how we work with them in social interactions. In both cases, the key is the correct use of learned knowledge in everyday life, which also benefits our surroundings.

As Brunck et al. (2017) stated, social-psychological competences are created in two components – an “unlearnable” component, e.g., a sense of humour or the intuitive handling of diverse situations or temperament, and a “learnable” component, consisting of competences we can work on. In the present study, we focused on learnable components. Social-psychological training, for example, is suitable for their development; it is, however, only offered in a limited manner in the preparation of future teachers.

### *Literature Review*

Attachment theory provides a framework for understanding interpersonal interactions by classifying individuals into attachment styles based on their early experiences with caregivers. It offers a comprehensive framework for interpreting interpersonal interactions by categorising individuals into distinct attachment styles that emerge from their early experiences with primary caregivers. According to this thesis, the nature of the bond formed between a child and a caregiver lays the groundwork for how individuals approach relationships throughout life, shaping their perceptions of trust, intimacy, and dependency.

Basic knowledge of relationship bonds and their diagnostics help teachers in the school environment, mainly in working with problem students. A teacher can use simpler methods, such as observation or a conversation with the student or their parents, to gain a notion of the types of relationship bonds their students have. Subsequently, they can apply their findings to their teaching strategies and to building relationships with students; it is also recommended that they share them with other experts and pedagogic employees (Priehradná, 2019).

If a teacher begins to observe distinct types of relationship bonds in their students, they can use this awareness to foster stronger, more supportive connections with each student. Recognising these attachment styles helps teachers understand how each student might respond to authority, feedback, and social interaction, allowing them to adapt their approach to meet individual needs effectively. If a teacher starts to notice displays of individual types of relationship bonds in their students, they can use them to improve their relationships.

### *Secure Attachment*

Secure attachment is a foundational aspect of psychological well-being and healthy relationships. Originating in early childhood, it is formed when a caregiver consistently meets a child's emotional needs, providing him or her with a sense of stability, trust, and affection. Children with secure attachment feel confident in exploring their environment, knowing they have a safe “home base” to return to, which encourages curiosity, resilience, and social confidence. This security in early relationships enables them to develop a positive self-image, with the understanding that they are worthy of love and respect. Individuals with secure

attachment styles typically exhibit high levels of trust and confidence in relationships (Bowlby, 1988).

Secure attachment in educational settings is critical for fostering a positive, supportive learning environment where students feel safe, valued, and motivated to succeed. Students with secure attachment tend to display greater confidence, emotional stability, and resilience, allowing them to engage more fully in classroom activities, form healthy peer relationships, and embrace challenges with a growth mindset. This attachment style, typically nurtured in early childhood through supportive caregivers, translates into the classroom as a sense of trust and openness toward teachers and classmates (Riley, 2011). These characteristics are essential for interactive psychological literacy, as they facilitate the exchange of ideas and emotions in a way that fosters mutual understanding.

#### *Anxious and Avoidant Attachments*

In contrast, students with anxious attachment styles may display clinginess, a high need for reassurance and difficulties in managing emotions (Cassidy & Shaver, 2016). This attachment style could negatively impact their ability to engage in healthy interaction with teachers, thereby limiting their interactive psychological literacy. Similarly, avoidantly attached individuals tend to shy away from emotional intimacy and may have difficulty engaging meaningfully in classroom interactions, leading to less effective communication and a lower capacity for social learning (Mikulincer & Shaver, 2007). Ambivalent children can require too much attention from the teacher or fight for it with their classmates. In this case, the teacher should show enough empathy and understanding towards the given student while at the same time establishing boundaries so as not to support any possible manipulative behaviour.

#### *Disorganised Attachment*

Students with disorganised attachment styles, which often stem from traumatic or inconsistent caregiving, may exhibit erratic or confusing behaviour in relationships, making it harder to predict their interaction styles (Lyons-Ruth & Jacobvitz, 2016). This instability could hinder their ability to engage in constructive teacher-student interactions, further affecting their psychological literacy in classroom settings. Disorganised children are susceptible to bursts of anger; they can attack and criticise the teacher for their initiative in teaching. As prevention against such behaviour, a clear lesson plan set up in advance, timely notification of any changes, and an empathic, understanding approach to the student may be used (Priehradná, 2019).

The results of the research by Chen et al. (2012) pointed out that ambivalent individuals have a higher tendency to perfectionist self-representation, i.e., they have a need to appear perfect to others and to earn their approval. Avoidant and disorganised individuals share information about themselves to a lesser degree, especially if the information is intimate. Their goal is to protect their reputation and hide their imperfections. In all insecure types, an effort to avoid rejection or feelings of incompetence is predominant.

Mikulincer and Shaver in Adamove (2017) stated that certain individuals resolve interpersonal conflicts more effectively, are more open to compromise, and can forgive faster. Ambivalent individuals perceive conflicts as catastrophic and can react in an exaggerated manner, with strong emotions. They can, however, also create discord with the goal of gaining attention. In avoidants, conflict avoidance and a decreased effort to resolve them occurs.

Cervera-Solís et al. (2022) researched attachment and the Big Five model. The research confirmed a relationship between neuroticism and an insecure relationship bond; i.e., insecure individuals are more prone to experiencing negative emotions such as anxiety or anger. Besides this, they found a relationship between secure and ambivalent bonds and higher extraversion,

as opposed to avoidant and disorganised bonds, where the level of extraversion was lower. At the same time, lower friendliness was shown in the latter. The lowest level of openness was measured in disorganised individuals. A higher level of conscientiousness corresponded to a secure relationship bond.

### *Psychological Literacy and Educational Contexts*

Psychological literacy involves understanding psychological concepts and applying them to real-world situations (Cranney & Dunn, 2011). In interactive contexts, such as teacher-student relationships, psychological literacy goes beyond cognitive understanding to include emotional intelligence, communication skills, and empathy. These skills are critical in fostering a productive learning environment.

Types of relationship bonds also influence the academic performance of students, though not directly. They mainly affect those characteristics of the child important to teaching, such as motivation or the ability to concentrate, which then change their performance, for better or worse (Wang, 2021). This means that children with a certain relationship bond feel safer and can devote more attention and concentrate better on the teacher's commentary, which subsequently increases their motivation and readiness for tests. Bonnell (2021) stated that university students with a secure bond are more persistent with challenges in their academic life, and it is more probable that they will complete their studies. Insecure children may have issues with self-control, or their behaviour can be conditioned by feelings of anger or sadness, through which they attempt to express the need for a feeling of security (Wang, 2021). Students with an evasive bond are almost always dissatisfied with the results of their work, and they can give up quickly if they fail. Ambivalent students tend to focus on their relationship with the teacher more than necessary, and their learning process is normally dependent on emotional support from their surroundings. Students with a disorganised bond do not have a great interest in learning; their main goal is security, which is why they may behave aggressively or offensively (Priehradná, 2019).

Besides the attachment of students, teachers should also realise their own type of relationship bond. A certain type of bond does not guarantee perfect relationships, but it does increase the chance of them being based on mutual trust and acceptance. A secure bond in a teacher may have a positive influence on the insecure bonds of their students, mainly if they perceive a model in them (Smith, 2023). Bonnell (2021) found in her research that a given relationship bond in a teacher can increase the interest of students in their studies and mainly their external motivation. Individuals with evasive bonds consider the closeness of others to be uncomfortable (Adamove, 2017), from which it can be derived that a teacher with this type of bond would avoid deeper relationships with their students. Ambivalent teachers will be more sensitive in relationships with students than other types, and they will have more difficulty tolerating any real, or wrongly perceived, rejection. Their emotions can be a source of aggressive behaviour, e.g., sarcasm, belittlement, yelling, or punishing an entire class for the behaviour of one individual (Ripley, 2011). The relationship bonds of teachers are also reflected in their relationships with colleagues. Their own feeling of security in the workplace and the productivity of their mutual relationships depend on it (Adamove, 2017). In this context, the research of Lovenheim (2012) is interesting, in that it showed that teams composed of individuals with more types of relationship bonds are more successful than teams in which individuals with a secure bond were significantly prevalent.

If individuals are aware of the impact of their type of relationship bond on their behaviour, they can use this knowledge and adapt more effectively to a situation (Smith, 2023). Teachers can therefore benefit from them. Eilert and Buchheim (2023) found in their meta-analysis that relationship bonds influence emotional regulation. Individuals with a secure relationship bond

exhibit adaptive emotional regulation and show an ability (willingness) to forgive in difficulties related to attachment, as well as the ability (willingness) to objectively evaluate the influence of the history of their relationship on their personal development. In evasive individuals, the authors described so-called deactivation strategies, i.e., a distance from emotional experience with the goal of avoiding possible rejection or abandonment by their loved ones. On the other hand, ambivalent individuals have a tendency towards so-called hyperactive strategies, or the hyperactivation of the bond system. Both types of strategies result in maladaptive emotional experiences and reduce work with emotions. Individuals with disorganised bonds normally react to difficulties related to attachment with dysfunctional strategies, and they cannot cope with managing very intense emotions.

The quality of teacher-student interactions plays a pivotal role in academic success. Teachers who exhibit high emotional intelligence and empathy can positively influence students' social and emotional development (Durlak et al., 2011, Jennings & Greenberg, 2009). However, attachment styles may mediate these interactions. For instance, students with secure attachment styles are more likely to engage in positive interactions, benefitting from emotionally intelligent teaching approaches. In contrast, students with insecure attachments may require additional support to navigate their relationships with teachers effectively.

Psychological literacy can be a predictor of academic success. Research suggests that students with higher psychological literacy tend to perform better academically (Birch & Ladd, 1997, Segrist et al., 2019). This is particularly relevant in settings where emotional intelligence and social understanding are necessary for collaboration and active learning. Students who can effectively manage their emotions, communicate openly, and understand social dynamics are better equipped to navigate the challenges of academic life, making psychological literacy an essential component of educational success.

Attachment plays a significant role in predicting psychological literacy, which refers to an individual's understanding of psychological concepts and their ability to apply them in everyday life. Attachment styles—formed in early childhood through relationships with primary caregivers—shape an individual's emotional regulation, self-awareness, and interpersonal skills, which are all foundational aspects of psychological literacy. A secure attachment style, characterised by a positive self-image and trust in others, generally promotes greater openness to learning about emotions, understanding social cues, and navigating relationships effectively.

Individuals with secure attachments are often more adept at recognising and managing their own emotions, as well as interpreting others' emotions accurately. This emotional awareness and regulation build a strong basis for psychological literacy, allowing individuals to approach situations with empathy and a reflective mindset. Securely attached students are more likely to develop high levels of interactive psychological literacy due to their ability to form trusting relationships, regulate emotions, and engage in effective communication (Waters & Cummings, 2000). These students often benefit from positive teacher-student interactions, which further reinforce their psychological literacy.

In contrast, insecurely attached students may struggle with emotional regulation and open communication, limiting their ability to engage effectively in classroom interactions. For instance, avoidantly attached students might be hesitant to seek help from teachers, while anxiously attached students may struggle with dependency issues, both of which can hinder the development of their psychological literacy (Mikulincer & Shaver, 2016).

### *Research Issue*

The research focused on examining the relation between relational bonding and interactive psychological literacy in preservice teachers. It aimed to describe the contexts of attachment as a predictor of interactive psychological literacy in student teachers, who are

confronted with a variety of children's reactions in their teaching practice, and whose attitudes in each situation play a key role in the resolution of these reactions. To make the teacher's work more effective, it is necessary to gain a more detailed insight into the possibilities of occurrence of problematic situations caused by disturbed relational bonds and the possibilities of their solution through interactive psychological literacy.

Although the concept of psychological literacy is still in its formative stages and more researchers have begun to focus on it only in recent years, practitioners are aware of its importance in practice. For example, Harris et al. (2021) and Cranney et al. (2022) equated psychological literacy with basic skills, such as reading, writing, and numeracy, highlighting its importance in education. It has, in their view, great benefits not only individually but also within the family and community.

From the perspective, it is important to explore the relation between attachment and interactive psychological literacy in educational settings, especially since both significantly affect the learning process, students' emotional well-being, and the quality of their interpersonal relationships. In a school setting, interactive psychological literacy is a key skill that helps students to better understand not only themselves but also others. Exploring these relations in educational settings allows us to better understand how teachers can adapt their approach to support students of different attachment styles. In this way, we can create an approach to learning that is not only academically but also emotionally supportive. Such an approach can help all students develop the skills needed to cope with the challenges of the school environment by giving them the tools to understand and improve their interactions with others.

#### *Research Aim and Research Questions*

The aim of the research was to explore the relation between relational bonding and interactive psychological literacy of preservice teachers. In the present study, we explored whether and to what extent anxiety and avoidance are related to all four types of interactive psychological literacy.

### **Research Methodology**

#### *General Background*

This research is part of a scientific project entitled VEGA 1/0255/24 - Professional competencies and psychological literacy of teachers. This project researches the psychological literacy of teachers and future teachers in the context of their professional competences. Specifically, this research examined the relation between the relational connectedness and psychological literacy of preservice teachers. The ambition of the research findings is to contribute to an improved understanding of the link between relational bonding and interactional psychological literacy and to formulate recommendations for practice.

The research employed two instruments: the ECR-R (Experiences in Close Relationships – Revised) and the ISK-K (Social Competence Inventory) questionnaires. Data collection was conducted between January 2023 and May 2023 through the completion of questionnaires in the classroom. The set of respondents consisted of preservice teachers with different endorsements in the second and third year of a bachelor's degree. The responses were evaluated, analysed, and interpreted.

### Sample

The sample consisted of students of teaching with various apprenticeships in the second and third year of bachelor's degree studies. As we were interested in the relationships between attachment and psychological literacy of prospective teachers, the sample was located in undergraduate teaching courses in years 2 and 3. First-year students were not included in the sample because we assumed that they could not yet have gained sufficient experience and knowledge during their first semester. Thus, the base set consisted of all subjects to whom the research results were to be applied. The sample population was formed by purposive sampling, which included teaching students in their second and third years of undergraduate studies.

The statistical sample consisted of 80 respondents from the University of Constantine the Philosopher in Nitra, Slovakia. Using 80 participants, an effect size ( $f^2$ ) of .15, 6 predictors, and a probability of .05, we calculated anticipated statistical power. The highest proportion of the respondents falls in the age range of 20 to 22 years (89.50%). Table 1 shows the characteristics of the respondents, including gender, age, and year of study at the bachelor's degree level. Ethical aspects were ensured through the Ethics Committee of the Constantine the Philosopher University in Nitra, which approved the project VEGA 1/0255/24 – Professional competencies and psychological literacy of teachers, within the framework of which the research was carried out.

**Table 1**  
*Characteristics of the Sample*

Gender	<i>N</i>	%
Female	69	86.25
Male	11	13.75
Age		
20	37	46.25
21	20	25.00
22	15	18.75
23	6	7.50
24	2	2.50
Level of Education		
Bachelor's study (2 <sup>nd</sup> year)	57	71.25
Bachelor's study (3 <sup>rd</sup> year)	23	28.75

### Instruments

*Relational bonds.* It explored relational bonds in the respondents via the Experiences in Close Relationships questionnaire – Revised, or the ECR-R (the original version was by Brennan et al. (1998); the revised version was developed by Fraley et al. 2000). The Slovak version of the questionnaire was taken from Adamove (2017). The questionnaire contains 36 self-assessment statements which describe experiences in close relationships. The respondents express their agreement or disagreement with the statements on a scale from 1 to 7 (1 – disagree completely, 7 – agree completely). The questions are divided into two dimensions: anxiety (questions 1 to 18) and avoidance (questions 19 to 36), which represent the independent variables in our research.

*Interactive psychological literacy.* To measure the interactive psychological literacy, a shortened version of the Social Competence Inventory questionnaire (ISK-K) was used. The questionnaire contains 33 statements and functions on a self-assessment model through a 4-point Likert scale (1 – do not agree at all, 4 – agree completely). It measures 4 areas of social competences: social orientation (10 questions), offensivity (8 questions), self-control (8 questions), and reflexivity (7 questions). The validity and reliability of the instruments are described in Table 2.

Descriptive statistics and the internal consistency of the instruments (measured as Cronbach's alpha) are presented in Table 2. All instruments had acceptable internal consistency, only offensivity and reflexivity had lower Cronbach's alphas (.54 and .49).

**Table 2**  
*Descriptive Statistics*

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>	<i>α</i>
Social orientation	80	2.98	0.39	2.10	3.80	.60
Offensivity	80	2.46	0.45	1.38	3.38	.54
Self-control	80	2.44	0.61	1.13	3.75	.82
Reflexivity	80	2.97	0.45	1.57	3.71	.49
Anxiety	80	3.13	1.25	1.17	6.00	.91
Avoidance	80	2.74	1.1	1.11	5.39	.89

*Note.* α – Cronbach's alpha

### *Data Analysis*

After data collection, analysis was performed using statistical methods in JASP software (JASP team, 2024). Descriptive statistics were used where we reported the number of valid questionnaires, modus, median, mean, standard deviation, kurtosis, skewness, minimum and maximum of all six variables. Subsequently, correlations between variables were examined using correlation analysis. The relations that were significant were explored further using regression analysis.

### **Research Results**

The correlation matrix is presented in Table 3. Only offensivity and reflexivity correlated with relational bonds. Thus, a linear regression analysis was conducted only for these significant relations.

**Table 3**  
*Pearson's Correlations*

	1.	2.	3.	4.	5.	6.
1. Social orientation	—					
2. Offensivity	.19	—				
3. Self-control	.29**	.46***	—			
4. Reflexivity	.20	.12	.02	—		
5. Anxiety	-.02	-.30**	-.45***	.08	—	
6. Avoidance	-.12	-.21	-.05	-.11	.41***	—

*Note.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$



A simple linear regression analysis was conducted to evaluate the extent to which anxiety could predict offensivity and self-control (Table 4). First, offensivity was tested as the dependent variable, and a significant regression was found ( $F(2,77) = 4.23, p = .002$ ); anxiety and avoidance explained approximately 10% of the variance in offensivity, and only anxiety was a significant predictor of offensivity.

In the second model, self-control was the dependent variable, and a significant regression was found ( $F(2,77) = 11.10, p < .001$ ); anxiety and avoidance explained approximately 22% of the variance in self-control, and only anxiety was a significant predictor of self-control.

**Table 4**  
*Results of Linear Regression Analyses for Offensivity and Self-control as Independent Variables*

Effect	Estimate	SE	$\beta$	95% IC	
				LL	UL
Offensivity					
Anxiety	-.09	.04	.03	-.18	.00
Avoidance	-.04	.05	.41	-.15	.06
Self-control					
Anxiety	-.25	.05	< .001	-.36	-.14
Avoidance	.10	.07	.14	-.03	.23

*Note.*  $\beta$  – unstandardised regression coefficient, SE – standard error, LL and UL – lower and upper limits of 95% confidence interval,  $\beta$  – standardised regression coefficient,  $p$  – significance.

## Discussion

The aim of the research was to explore the relation between relationship bonds and interactive psychological literacy in future teachers. It was found that attachment was a predictor of interactive psychological literacy, but with a certain limitation. Correlation analysis detected an existing weak, almost medium negative relations between anxiety and offensivity and a medium strength negative relationship between anxiety and self-control.

Regression analysis subsequently showed that the models respectively explain 10% of the variability in offensivity and 22% of the variability in self-control. Statistical significance was confirmed in both models. No significant relations were registered between anxiety and social orientation, anxiety and reflexivity, and individual social competences.

The results of the research indicate that increased anxiety does, to some degree, influence the level of offensivity, or a less active approach to people, and lower effectivity in pursuing one's goals in social interaction. The model in question explained 10% of the variability in offensivity. An increase in anxiety also predicts, to a certain degree, a decrease in the level of self-control, i.e., a weaker ability to be flexible and to regulate one's emotions and behaviour. Here, the model in question explained 22% of the variability in self-control. These results are in accordance with the results of another research (Cervera-Solis et al., 2022, Chen et al., 2012, Eilert & Buchheim, 2023). Therefore, we think that pedagogy students should be supported and motivated to reduce their anxiety, e.g., through emotional corrective experience in group work focused on self-awareness.

Based on these findings and those of other authors, it is recommended that relational bonding diagnostics be used in the preparation of preservice teachers. The ECR-R questionnaire

used in this work is a suitable method, as it is not demanding from either a time or administrative point of view. Individuals can fill it in themselves and can self-evaluate it. Work with the questionnaire can be undertaken during classes on ontogenetic psychology, which concerns itself with relationship bond theory. The results of the questionnaire can give students a new view of their own personality and self-perception in the context of interpersonal relationships, whereby it can direct their self-development. Relationship bond-type diagnostics are also recommended by other experts in the field, e.g., Goldman (2023), Fielding (2023), Lovenheim (2021), Robinson et al. (2024), etc.

If we want to use the knowledge about relational bonding in the process of self-development, it is important to find out which of our characteristics influence us the most.

Journalling, or describing our thoughts, feelings, and experiences (Sohal M. et al., 2022) is a suitable method of self-reflection which helps us find out how and why we react in certain situations (Bielešová & Koreňová, 2021). To support journalling in students, we recommend more frequent coursework in the form of essays in psychology courses. The essays do not necessarily have to be of an academic character; rather, they should be reflections in which students describe their experiences with a diverse psychological concept with the goal of self-reflection. For students to be motivated in journalling, it is important to provide them with interesting supporting materials, topics, or questions to react to. There are several examples (Lovenheim, 2021):

- Who represents the biggest support for you in your life?
- What do you feel when you ask someone for help and when someone asks you for help?
- Describe how you envision an ideal romantic relationship.
- For each person who participated in your childhood upbringing, list three adjectives which would describe the way they brought you up.
- What is the most intensive experience of your childhood?

Authors further suggest providing students with a space where they can get to know and observe their behaviour directly in social interactions. Authors recommend the frequent inclusion of seminars and exercises into the study plan of future teachers, during which they would be able to develop their self-reflection as well as individual social competences, and therefore directly their interactive psychological literacy. As an example, authors list social-psychological training, in which participants are activated using experience methods in smaller groups; they build on their experiences and interconnect practical knowledge with theoretical knowledge (Šoltésová, 2012).

According to Škodová and Paceková (2012), this training can also act as a support method in the prevention of burnout syndrome and decrease existing symptoms of burnout in students in helping professions. Several publications have emphasised its significance (Čerešník et al., 2013, Dúbravová, 2013, Sokolová et al., 2014). In relation to this, we lean towards the opinion of Rapsová (2023), who recommended including social-psychological training among compulsory subjects and increasing its time allocation.

Authors also suggest the inclusion of social-psychological training as compulsory in the undergraduate stage of studies. Čerešník et al. (2013) listed several other methods for the development of social competences, such as autoregulation sensitisation training aimed at self-control and self-discovery; active programme social learning, where the participants resolve diverse conflict situations; or training (with video recording) in which the participants develop specific skills through imitation or micro teaching, and so on. Besides the above-mentioned suggestions regarding training and education, we recommend further research be carried out in this area.

### *Limitations*

Research is an essential tool for advancing knowledge and solving problems, but it is not without limitations. Awareness of these boundaries is essential for the accurate interpretation of findings and the advancement of scientific knowledge.

The sample size (80) and the use of the ISK questionnaire in a shortened version (ISK-K), where the individual social competences are measured in 7–10 questions, are considered limitations of our research. In future research, we recommend investigating a larger sample of people and using the ISK questionnaire in its full version, by which the relations between anxiety and the primary scales of self-control (self-control, emotional stability, behavioural flexibility, internality) and offensivity (the ability to prevail, willingness toward conflict, extraversion and decisiveness) can be determined.

### **Conclusion and Implications**

The results of the research showed that attachment can be denoted as a predictor of interactive psychological literacy, although only to a certain point. The results we obtained pointed to the influence of relationship bonds on the behaviour of individuals and their acting in social interactions. Authors therefore consider it important to motivate future teachers to get to know and investigate their relationship bonds, thanks to which they will reach a better understanding of their own personality and the personalities of others. They also obtain new knowledge about themselves and their abilities, on which they can then build and develop. Beside self-discovery, practice is also important in self-development. By practice, authors mean verified knowledge and skills stemming from experience gained directly in social interactions.

Regarding the benefits of knowledge of one's own relationship bonds, we recommend diagnostics of its type in future teachers in psychology courses using the ECR-R questionnaire, which is easy to process. The effectiveness of self-reflection and self-knowledge could be developed in psychology courses. One best practice is the writing of essays in which students could reflectively describe their experiences and behaviour in various situations in relation to the psychological concepts discussed. In the context of developing their traits in practice, we recommend the inclusion of social-psychological training into the compulsory subjects of pedagogy study programmes at the undergraduate level. Authors believe that our work can contribute to the development of preparation of future teachers and can inspire further research in relationship bonds or interactive psychological literacy.

Attachment styles play a critical role in shaping interactive psychological literacy, which is essential for positive teacher-student interactions and academic success. Securely attached students are more likely to develop strong psychological literacy, benefitting from emotionally supportive and communicative relationships with their teachers. Insecurely attached students, however, may require targeted interventions to improve their emotional regulation and social interaction skills. Understanding the impact of attachment on psychological literacy can help educators create more inclusive and supportive learning environments that cater to the emotional and social needs of all students.

### *Implications for Educational Practice*

Recognising the impact of attachment styles on interactive psychological literacy can inform educational practices aimed at improving teacher-student interactions. Teachers can benefit from understanding their students' attachment styles and tailoring their approaches to foster secure relationships. Interventions focused on building emotional intelligence and social skills may also help students with insecure attachment styles develop better interactive psychological literacy.

In this context, it is important to focus on teacher education in terms of professional development programmes that focus on attachment theory and emotional intelligence and its application to practice. Through such programmes, educators can be equipped with the skills needed to recognise and respond to students' needs. Secure teacher-student relationships allow for a supportive learning environment that develops interactive psychological literacy. They allow for classroom strategies that emphasise emotion regulation, open communication, and empathy. In particular, activities that promote social-emotional learning provide students with the tools to navigate complex social interactions, ultimately leading to better academic outcomes and more meaningful teacher-student relationships.

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### Declaration of Interest

The authors declare no competing interest.

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