

# WORK-RELATED COPING BEHAVIOR AND EXPERIENCE PATTERNS AND THEIR CORRELATES IN TEACHER EDUCATION STUDENTS: A QUALITATIVE STUDY

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**Abstract:** This qualitative study explores how Czech teacher education students with a high match to one of the four Work-Related Coping Behavior and Experience Patterns perceive their academic success, academic self-concept, and academic self-efficacy. Using semi-structured interviews with six prototypical representatives of patterns G, S, A, and B, the findings reveal distinct profiles consistent with previous quantitative research while adding nuanced insights, particularly regarding the challenges associated with the risk patterns A and B. The study provides preliminary evidence that enriches understanding of the nature of these patterns and their academic correlates, offering implications for teacher education and student support.

**Keywords:** occupational vulnerability, teacher education, academic functioning

## 1 Introduction

Teachers play a vital role in shaping individuals and society, yet even before entering the profession many education students experience considerable psychological vulnerability (Mašková, 2023). These difficulties may later translate into occupational health problems, affecting both their well-being and future professional functioning. This underscores the need to understand and address such risks already during teacher education.

### 1.1 Work-related coping behavior and experience patterns

The concept of Work-related Coping Behavior and Experience Patterns is assessed using the homonymous diagnostic inventory—the *Arbeitsbezogenes Verhaltens- und Erlebensmuster* (in German; Schaarschmidt & Fischer, 2008). The 66-item AVEM measures 11 dimensions across three domains (professional commitment, coping capacity, subjective well-being) and classifies respondents into one of four empirically derived work-related patterns. These patterns reflect health-relevant constellations of motivation, coping resources, and emotional functioning. Overall, it enables early identification of individuals at increased risk (patterns A and B) and helps target preventive interventions before health problems fully develop (Kieschke & Schaarschmidt, 2008; Schaarschmidt & Fischer, 2008). The characteristics of the four work-related patterns are as follows: (1) Pattern G (Healthy Ambitious): A health-promoting profile characterized by high but balanced professional commitment, strong coping resources, and high subjective well-being. Individuals can engage deeply in work while maintaining emotional distance and resilience. (2) Pattern S (Unambitious): Marked by low professional commitment and reduced work investment, but with adequate coping capacity and high well-being. Although health is not at risk, motivation tends to be low, and engagement is minimal. This pattern may act as an energy-saving strategy under stressful conditions. (3) Pattern A (Excessively Ambitious): Defined by very high commitment (strong ambition, perfectionism, overexertion) combined with weak coping resources and limited emotional detachment. Individuals experience high strain and low emotional reward, which increases vulnerability to stress-related health problems. (4) Pattern B (Resigned): The least favorable profile, combining low professional commitment with very low coping capacity and poor well-being. It mirrors core features of burnout—exhaustion, negative emotions, and withdrawal—and signals heightened long-term vulnerability to occupational health issues.

### 1.2 Correlates of work-related patterns in university students

Studies utilizing the AVEM inventory in university student populations—conducted mainly in German-speaking countries—have identified several correlates of the distinct work-related patterns. The results of the published studies consistently show that female students, teacher education students (compared to medical students), and students who receive insufficient social and financial support are at greater risk of being assigned to work-related patterns that indicate vulnerability to burnout and occupational health issues. Moreover, students assigned to these patterns, especially to the resigned (burnout) pattern, are prone to manifest other negative characteristics, such as less adaptive personality traits and coping strategies, vulnerability to stress, lower quality motivation, lack of commitment to the chosen career and suitability for the profession, and impaired physical and mental health. In contrast, the most desirable correlates—such as adaptive personality traits, higher quality motivation, commitment to the chosen career, suitability for the profession, stress resistance, adaptive coping, and better physical and mental health—were related to the healthy ambitious pattern G (Mašková, 2023).

Although topics such as motivation and mental health have been studied extensively, evidence on academic functioning—including academic self-concept, self-efficacy, and perceived success—remains limited. The available findings for students, including teacher education students, suggest a varied set of findings. Self-perceived academic achievement appears to be highest in G and A types (Aster-Schenck et al., 2010; Voltmer et al., 2012), and these groups also report the greatest perceived success during teaching placements (Cramer, 2012). In contrast, expected placement success tends to be higher among G and S types than among A- and B-type students (Cramer, 2012). Similarly, expected future career success is highest in G-type students and lowest in B-type students (Rothland, 2011). Consistent with these trends, self-efficacy is higher in G and S types compared to A and B types (Bauer, 2009). Overall, these findings show a mixed pattern that warrants deeper and more systematic investigation.

### 1.3 Academic self-concept and self-efficacy

Academic self-concept refers to students' subjective perceptions, beliefs, and knowledge about themselves in academic situations, including the abilities, attributes, and limitations they consider part of their identity (Ferla et al., 2009; Ghazvini, 2011). These beliefs play an important developmental role, shaping cognitive, social, and emotional engagement (Bong & Skaalvik, 2003). Although related to self-efficacy, the two constructs differ. Academic self-concept has both cognitive and affective components, concerns general abilities, is shaped by past experiences and social feedback, and focuses on whether one possesses certain competencies. Self-efficacy is primarily cognitive, task-specific, future-oriented, and reflects beliefs about what one can accomplish with a given ability. It is formed through previous performance, comparison with others, and verbal persuasion, particularly when delivered by trusted sources (Bong & Skaalvik, 2003; Ferla et al., 2009).

## 2 The present study

Work-related patterns in teacher education students have been widely studied quantitatively using the AVEM, yet no qualitative research exists. This gap limits deeper insight into the characteristics and experiences associated with each pattern. The present study addresses this gap by using semi-structured interviews to examine how students with a high match to one of the four work-related patterns describe their academic functioning, focusing specifically on perceived academic

success, academic self-concept, and academic self-efficacy. The study is guided by two research questions:

RQ1: What manifestations of perceived academic success can be observed among individuals with a high match to each work-related pattern?

RQ2: What manifestations of academic self-concept and self-efficacy can be observed among individuals with a high match to each work-related pattern?

### 3 Method

#### 3.1 Participants

Participants were selected through purposive sampling from teacher education students who had previously consented to further contact during a first-year quantitative survey. From this pool, we invited those whose work-related patterns showed over 95% pattern concordance—considered prototypical representatives of each pattern (Schaarschmidt & Fischer, 2008)—and who agreed to participate. Six students took part, all of them women aged 20 years. Participant characteristics are presented in Table 1.

Table 1: Participant Characteristics

Respondent	Year of study	Specialization	Pattern	Level of concordance
G1	2	Art and Chemistry for LSS	G	99.33%
G2	2	Art and Russian for LSS	G	97.51%
S1	1	English and Spanish for USS	S	98.69%
S2	1	English and Spanish for USS	S	98.94%
A1	2	Czech and History for LSS	A	95.85%
B1	1	English and Czech for USS	B	99.99%

Note. LSS = lower secondary school, USS = upper secondary school.

#### 3.2 Procedure

Data were collected through semi-structured interviews, allowing coverage of key topics while remaining flexible to participants' responses. Interviews were conducted in a quiet private space at the university, lasted approximately 45 minutes, and were audio-recorded. Recordings were transcribed verbatim for analysis, and to ensure anonymity, neither the audio files nor full transcripts are publicly accessible. Prior to participation, all participants received detailed information about the aims of the study, the voluntary nature of participation, data handling procedures, and their right to withdraw at any time without consequences. Written informed consent was obtained from all participants before data collection. Each participant received a one-time stipend of 500 CZK as compensation for taking part in the interview.

#### 3.3 Data analysis

Data were analyzed using deductive thematic analysis following the six-step procedure described by Braun and Clarke (2006). After repeated reading of the transcripts, semantic codes were generated to capture explicitly stated meanings. These codes were then grouped into themes informed by the research questions and the existing theoretical framework on work-related patterns. Themes were reviewed against the coded data and the full dataset, refined for coherence, and clearly defined. Credibility was enhanced not only through careful purposive sampling of prototypical participants with high pattern concordance and the use of direct verbatim quotations, but also through peer reflection and collegial discussion throughout the

analytic process. Transferability was addressed by systematically comparing the qualitative findings with existing results. This allows readers to assess the potential applicability of the findings to similar contexts. Dependability was ensured through the use of a consistent interview guide across all participants, verbatim transcription of audio recordings, and re-coding of the data, allowing for transparency and traceability of analytic decisions throughout the research process.

### 4 Results

#### 4.1 Perceived academic success

G-type students define academic success more broadly than achieving good grades, passing examinations, or completing the semester without complications. They also emphasize meeting self-set goals, acquiring new knowledge, consolidating previously learned material, and experiencing enjoyment during their studies. These indicators are not explicitly required by the university, suggesting that G-type students establish their own additional criteria for what constitutes success. G-type students include experiences of enjoyment and personal growth within their definition of academic success. As one student noted, "We have sculpture class, which is something I had never done before, and I found out that I actually enjoy it. I'm really satisfied with what I created there." (G1). They also describe setbacks such as receiving lower grades, perceiving weaker performance compared to peers, or feeling they have acquired less knowledge than others. As another respondent explained, "It's definitely quite difficult to see your classmates manage something while you notice you still have some gaps." (G2). These setbacks are typically interpreted as minor, correctable issues or as opportunities for learning and improvement. As one G-type student put it, "I tell myself that I need to try harder next time. And if it's a test I have to retake, I just spend more time preparing for it." (G1).

For S-type students, academic success is described primarily in terms of acquiring new knowledge, passing examinations, submitting seminar papers on time, and being accepted into the Erasmus program. One participant stated, "I successfully completed my seminar paper on [...], and now in the first semester I managed everything on the first attempt." (S1). The only setback mentioned by S-type students was the failure to meet self-imposed goals. When experiencing such a setback, they tend to evaluate the issue and formulate a revised plan for future action. As one informant explained, "I made a resolution to work on English transcription because I'm not good at it and haven't done it yet. So that's a kind of failure, because I set it as a goal and still haven't done it." (S2).

The A-type student reported only experiences of success. She considered success not only the completion of all examinations but also the fact that she passed each of them on the first attempt. She stated that she has not encountered any setbacks so far. However, she acknowledged that these achievements came at the expense of her personal life, as she dedicated the entire semester solely to studying. As she noted, "I think so far it's only been successes. Even though it takes a lot of effort and I really have to study hard, I still see only success at this point." (A1).

The B-type participant described academic success primarily as completing most courses despite periods of demotivation and procrastination. As she noted, "I passed, and I didn't get any barely-passing grades. So, in the end I somehow learned it." (B1). In terms of setbacks, she mentioned missing an exam session and failing a course she had considered easy, which led her to underestimate the preparation required. "To be specific, I didn't attend the exam for one course. I went to the first attempt and failed. For personal reasons I couldn't make it to the second, so I basically let it go. I'll have to retake the course in the second year." (B1). She did not feel the need to cope with these setbacks or propose any preventive strategies. Although the failure did not weigh heavily on her, it did elicit a sense of personal disappointment. As she explained, "It didn't really weigh on me. I just thought it was annoying that I'd have to repeat it. I was a

bit disappointed with myself because I assumed it would be an easy course.” (B1).

#### 4.2 Academic self-concept and self-efficacy

G-type students believe they plan their time more effectively than others and possess greater knowledge or experience in certain areas. They also view themselves as more motivated, diligent, eager to learn, and disciplined. Additional strengths mentioned include their extraverted disposition, positive attitude, and ability to work well with children. As one student noted, “I attended art classes at the arts school from the first grade until the end of high school, so when a teacher mentions certain techniques, I already know them.” (G2). Their main perceived weakness is a reduced ability to explain subject matter to children. As one respondent stated, “I can’t always express myself precisely, so I’d worry that the children might not fully understand me.” (G1). Although they recognize that university provides limited opportunities to make a strong impression on instructors, they still believe they create a generally positive image—one of effort, diligence, and consistent attendance. As one of them explained, “I hope they see me positively, as someone who really works hard and tries to manage everything.” (G2). Regarding peers, they hope to be perceived as extraverted and hardworking, and potentially as competitors. As one student remarked, “I see them as competitors, and they might see me as competition too. But I think it definitely motivates us.” (G2).

S-type students view their main strengths—relative to their peers—as the ability to create an effective study plan, thorough preparation for classes, specific knowledge and experience, adaptability, diligence, in-class engagement, willingness to help others, higher creativity, and a modern approach to teaching. As one student noted, “I did much better in languages than most of my classmates.” (S1). Another commented, “I think planning is where I stand out; when I watch my classmates, I notice that I plan things much more.” (S2). Their perceived weaknesses include a lower ability to explain subject matter clearly, as well as insufficient assertiveness and authority. As one participant stated, “Explaining things is something I’m not very good at.” (S2). They believe that both teachers and peers generally perceive them positively—teachers focus more on their classroom engagement, while peers notice their helpfulness. According to one student, teachers likely see them as active and responsible: “As a good student. Because I’m active in class, I try to maintain the best possible relationships with my teachers.” (S1). Peers, in their view, recognize their helpfulness, self-improvement efforts, and occasional tendency to procrastinate. As one participant explained, “They already know about my procrastination—it’s not ideal, but otherwise things are fine.” (S1). Another added, “I think they know I’m happy to help, that I help my classmate with Spanish a lot because she hasn’t studied it very long, so she’s not afraid to reach out to me.” (S2).

The A-type participant reports both positive and negative aspects of her self-perception, with a slightly stronger emphasis on the negative. She believes she is more diligent and hardworking than others, yet she often feels out of place, alienated, and inadequate. She experiences the university environment as lacking close connections and perceives little interpersonal interest from others. As she explained, “I feel like I don’t really have many people there to talk to, so I feel kind of alienated, and it always seems like I just go there to sit through things, but the actual contact with people isn’t really there.” She thinks instructors see her in class as diligent and responsible, or simply as unremarkable and average. During oral examinations, however, she tends to become stressed and assumes that teachers subsequently view her as someone who crams, learns things by rote, or fails to prepare adequately. As she put it, “I always give it my maximum, but then stress gets to me, and I end up saying things I know are wrong—things I’d never normally say. And then I think teachers see me as someone who either memorizes everything or didn’t prepare properly.” In her view, classmates tend to perceive her as very intelligent, but they attribute her performance to innate abilities rather than effort. As a result, she sometimes senses envy from peers and feels they may view her

as competition. She also thinks they assume she cares only about her studies. As she noted, “There’s a bit of envy and a bit of sniping, but no one sees what’s behind it—that I actually prepared, and they didn’t.”

The B-type participant perceives herself predominantly negatively in comparison with others. She reports tendencies toward procrastination, neglecting responsibilities, poor memory, weak explanatory skills, disorganization, laziness, low performance, and ineffective planning. At the same time, she believes she has stronger knowledge and experience in English and that she can be more understanding and empathetic than others. She would like to develop more effective study techniques and improve her time management in the future. As she explained, “I have this unpredictable memory—sometimes I can recite an entire text word for word, and other times I can’t recall anything.” She also described herself as “a messy student, maybe even a lazy student. I guess I’m pretty lucky that even when I ignore things, they somehow end up working out.” Her negative self-perception extends to how she believes she is viewed by teachers and peers. She thinks teachers mostly do not notice her, and if they do, they see effort and unrealized potential. As she stated, “I don’t think many teachers pay attention to me.” In her view, peers perceive her as unremarkable, quiet, and unfriendly. As she recalled, “I was told that I have a look as if I wanted to kill someone.”

#### 5 Discussion

This study aimed at deepening our knowledge on the correlates of work-related patterns assessed by the AVEM inventory in Czech teacher education students, employing a qualitative approach and focusing on less-researched topics related to academic functioning. With respect to the perceived academic success, the broadest range of academic successes was reported by G-type students. These successes reflect not only academic performance or criteria implicitly associated with being a “good student,” but also the fulfilment of personal aims and self-defined goals. Although they do report setbacks, G-type students tend to downplay them and treat them primarily as opportunities for future learning. S-type students also report mainly successes, though with less variety, focusing more strongly on academic performance and the fulfilment of standard “good student” criteria. Nevertheless, when setbacks occur, they are interpreted similarly to those in the G pattern—as chances to learn from mistakes and to improve. The A-type student described her study experience as consisting solely of successes related to academic performance and the fulfilment of standard “good student” criteria. However, these achievements appeared to be attained through substantial effort at the expense of her personal life. For the B-type student, academic success was defined as fulfilling academic obligations without being at the edge of failing to meet them. She focused more on setbacks than on achievements, and these setbacks tended to reinforce her already negative self-perception rather than motivating preventive or strategic efforts.

With respect to academic self-concept and academic self-efficacy, both G-type and S-type students show generally positive self-perceptions and readily identify their strengths, while sharing the same perceived weakness in explaining subject matter. They also expect teachers to view them favorably. The main difference lies in peer perceptions: G-type students anticipate mostly positive evaluations, whereas S-type students expect a more ambivalent view—being seen as supportive but also associated with negative traits such as procrastination. The A-type student’s self-perception is more ambivalent: although she recognizes certain strengths, these tend to be overshadowed by persistent feelings of inadequacy and alienation. Her expectations regarding how teachers and peers perceive her are similarly mixed, marked by negative undertones. She assumes teachers may interpret her stress-induced performance as incompetence, and she feels peers misunderstand her efforts—perceiving her achievements as innate rather than earned, which contributes to a sense of interpersonal misalignment. The B-type student perceives herself predominantly negatively, focusing mainly on her shortcomings. Her expectations of how teachers

and peers view her also carry a negative undertone—either assuming she is not noticed at all or that she is perceived in an unfavorable light.

The findings of the present study go beyond the quantified results reported by previous authors on academic functioning. While both A- and G-type students typically score high on perceived achievement (Aster-Schenck et al., 2010; Cramer, 2012; Voltmer et al., 2012), our results show that their subjective experience of success differs markedly, especially when comparing G- and A-type students. Although the A-type student reported no failures—which may indeed suggest a high level of success—our findings show that this picture is far less glorious than quantitative studies might imply, as such success comes at the substantial cost of sacrificing their personal life. This study also confirmed what previous qualitative findings have suggested—namely, that G- and S-type students show better success expectations and higher self-efficacy than A- and B-type students (Bauer, 2019; Cramer, 2012; Rothland, 2011). Our results not only support the more positive future outlook of G- and S-type students but also reveal a more positive present self-view in the context of their academic studies. At the same time, the study offers a more nuanced understanding of pattern A, revealing its inherently ambivalent character in contrast to the clearly negative profile of pattern B—an insight that would remain hidden if only quantitative data were considered. In conclusion, this study offers a valuable contribution with both theoretical and practical implications.

The main limitation of this study is the small research sample. In both risk patterns, only one participant was included due to limited willingness among these students to take part in the interview. Moreover, the participants differed in their year of study, so for second-year students more time had passed since the first-year AVEM survey, making shifts in pattern assignment possible. Given these limitations, the findings should be viewed as preliminary and as providing initial input for future qualitative studies on this topic.

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## Primary Paper Section: A

## Secondary Paper Section: AN, AM